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ORIGINAL LECTURES.

THE PRINCIPLES OF MODERN THERAPEUSIS.

Abstract of an Introductory Lecture delivered

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THE practice of medicine among the Chinese is based upon the teachings of experience: their practitioners have seen disease get well after the administration of camel's dung, dried frogs, and the like, and are convinced of the potency of these agents. Our forefathers at one time resembled the Chinese in their methods of practice: scarcely a modern Chinese remedy that does not find its analogue in mediæval European medical annals. The principle of empiricism has served equally in both cases. With the Chinese, however, in some hundreds of years, empiricism has not improved itself, whereas in Western civilization empirical observation has been continually correcting experience: to-day it is discovered that the observation of yesterday was a false one and is to be thrown aside, whilst the morrow, in turn, reveals the false lights of to-day; and so continual progress is made. This progress has largely been aided by the so-called statistical method,—a method, much extended by Louis, in which, instead of single cases being compared with one another, great groups of cases are employed: instead of a pneumonia with a pneumonia, fifty pneumonias are compared with fifty other pneumonias. This method is certainly greatly superior to the use of single cases, but, even in its highest development, is faulty and purely empirical. An able medical writer of mathematical turn has calculated that thirty thousand cases of pneumonia would be required to be collected before exactly a similar case should recur. That clinical empiricism has accomplished much for the good of mankind is, of course, indisputable; but it is equally indisputable that it remains to-day, and will remain to the end, *empiricism*.

Under these circumstances, it is but natural that men should desire some guiding

therapeutic principles which should yield firm scientific foundations for progress, some law of healing which should give consistency and permanence to the treatment of disease.

These things, being so, attention is at once challenged by the existence of a large body of medical practitioners who affirm that their practice is based upon a scientific law, which dominates all medical treatment.

Space is here wanting to discuss the various doctrines enunciated by Hahnemann, the founder of the so-called homœopathic school; some of these are completely abandoned by his own followers. The dogma of infinitesimals is too absurd to be combated by serious reasonings. It affirms, not that exceedingly minute, almost infinitesimal particles of certain materials are capable of profoundly affecting the human organism, but that an inert material, like chalk, when minutely divided and subdivided, almost *ad infinitum*, becomes "potentized,"—*i.e.*, endowed with supreme powers which in its larger dose it did not possess. The only shadow of truth contained in this absurd dogma is to be found in the fact that a few substances, like calomel, are absorbed from the alimentary canal only in small quantity at a time, and hence that minute repeated doses have much more effect than a much larger quantity given at once.

The doctrine of infinitesimals is being abandoned by most of the so-called homœopathic practitioners. It is not the important pivotal doctrine of their system of therapeutics. This central doctrine is one which originated with Paracelsus rather than with Hahnemann, and is expressed in the dogma, *Similia similibus curantur*; it is that a symptom is to be cured by the administration of a remedy which in the healthy man will cause such symptoms.

We suppose that few physicians will deny that sometimes a symptom may be relieved by a remedy which is capable of producing such symptom in the normal man. For example, small doses of ipecacuanha are confidently affirmed to cure vomiting, on occasion; and undoubtedly alcohol will relieve the delirium of certain kinds of exhaustion,—a delirium which may be closely simulated in alcoholic intoxication.

A law of nature, however, has no ex-

ceptions, and if exceptions be found to an asserted law, such law is only asserted, not real. Now, there are an infinite number of exceptions to this so-called law of therapeutics. Thus, aconite will often relieve fever, reduce the temperature, and cause sweating; but aconite cannot be made, under any circumstances, to cause anything like fever, to increase the temperature, or to dry the skin. Again, if delirium be not due to exhaustion, but to inflammation of the brain or its membranes, alcohol will increase, not lessen, the cerebral disturbance. In such a case, a remedy like bromide of potassium, which is allopathic to active delirium, and produces cerebral sedation and stupidity in the normal man, might be of service.

Without occupying more space, it is evident that neither a homœopathic nor an allopathic law of therapeutics really exists, and that, if we would scientifically treat disease, we must look deeper and study the conditions of system which underlie symptoms, knowing that very similar symptoms may be produced by antagonistic bodily conditions. If vomiting result from depression of the gastro-intestinal nervous system, we are to treat that depression; if it arise from gastric inflammation, we are to direct our measures against that inflammation. It is not the symptom, but the cause of the symptom, which the scientific physician searches out and endeavors to combat.

The modern physiological school of therapeutics starts with the understanding that there is at present no known law of therapeutics, unless it is that of antagonisms,—by which is meant that it is possible, when a mass of living protoplasm is depressed by some agent, to overcome the depression by a second agent, which is stimulant to the protoplasm; or, in other words, that whilst some agencies increase the molecular movements of the protoplasm, others lessen them, and that it is at least theoretically possible to balance more or less perfectly one of these forces against the other.

The great therapeutic departure of the last decade is the general abandonment of the statistical method of therapeutic research, and the substitution therefor of the so-called physiological method. According to the latter plan, disease is to be first studied in its natural history, so as to determine whether it has a definite course

which cannot be arrested, and, if so, what is the progress of such course; whether the natural tendency of the disease is towards recovery or towards death, and, if the former, why this tendency is sometimes not fulfilled,—*i.e.*, how death is produced in the exceptional cases. If the tendency of a disease is fatal, then the study of the possibility of arresting the disease becomes a problem of great interest.

Having, by studies of the character just glanced at, determined what is possible and useful to be done, the therapist next studies the drugs and remedial agencies at command. By investigations upon man and the lower animals he endeavors to learn exactly how these drugs act upon the human system, first in health and afterwards in disease.

When he has by these two classes of studies learned, in the first place, what he wishes to do, and, in the second place, what he has to work with, he adapts his means to his ends by reasoning not different from that which guides the chemist, the engineer, or any one dealing with difficult force-problems.

So long as disease was looked upon as a sort of evil spirit in possession of the body and it was believed that all disease naturally tended towards death, our knowledge of the natural history of disease grew but slowly. The one great use of homœopathy in the world has been the showing that a large proportion of cases of disease under proper nursing will get well without medical interference, and that the indiscriminate active medication by bleeding, salivation, etc., as practised by our medical forefathers, robbed of life many of the sick who would have otherwise recovered.

Emboldened by the results obtained by the administration of infinitesimal—*i.e.*, inert—doses, doctors have made and are still making accurate studies of the natural history of disease. So that, in perhaps the majority of acute cases, properly-educated physicians now know exactly what they want to do in order to aid nature and to steer the patient successfully past the dangers in the route along which he must travel.

The modern scientific therapist, knowing what he desires to do, studies his instruments. To do this he experiments upon animals, because the modern conscience refuses to allow of human vivisection.

tion. It has been over and over again denied that we can reason from the action of drugs upon animals to their action upon man; but it is not worth while, at present and in this place, to attempt to show in detail the absurdity of such denial. The whole evidence of modern science indicates that, at least in his animal organism, man is not a mysterious creature apart from the rest of creation, but is an animal having structural and chemical relations, within and without, similar to those of other animals.

As an instance and exemplification of these modern therapeutic principles, we may cite chronic valvular heart-disease. By a study of the disease, we have learned that it has no definite course and no tendency to cure; that death is in most cases finally produced by cardiac exhaustion; that life is prolonged by a so-called compensatory hypertrophy of the heart; and that if the increase of the heart-power be proportionate to the increase of the heart-work, a comfortable existence may be in most cases enjoyed almost indefinitely. The clinician thus has learned that it is his function so to guide the patient whose heart is weak and has diseased valves that, if it be possible, compensatory hypertrophy shall be reached. He does this partly by proper attention to hygiene and partly by the use of a drug—digitalis—which, chiefly by experiments upon the lower animals, he knows quiets the excessive movements of a weak, irritated heart by stimulating the inhibitory nerves, and at the same time acts as a powerful tonic to the muscular walls of the heart, and especially aids the nutrition of the viscus by increasing the activity of its circulation.

Summing up into a sentence, it may be said that the general principles which underlie rational therapeutics are to know what can be done and what it is desirable shall be done; then to know the means at command; and, finally, to adapt the means to the end.

At present, the therapist is forced to supplement this principle by a pure empiricism, on account of the imperfection of our knowledge, not so much of the action of therapeutic remedies as of the nature of disease. We have no idea as to the nature of malaria, or of its immediate action upon the human organism; how then can we tell in what way quinine acts as a specific against it,—a fact which we abundantly

know empirically? The best therapeutic practice of to-day is therefore a mixture of science and empiricism; but the science has enormously increased in the last twenty years, and is advancing with arithmetical progression.

ORIGINAL COMMUNICATIONS.

REPORT ON THE PROGRESS OF GENERAL PATHOLOGY AND CLINICAL MEDICINE.

BY JAMES C. WILSON, M.D.,

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LOCAL TEMPERATURE IN BILIARY COLIC.

DR. JULES CYR calls attention to the diagnostic value of local thermometry during the attack, in a monograph that has recently appeared (*Traité sur l'Affectation calculieuse*, Paris, 1884). If, during the paroxysm, the thermometer be applied to the area of greatest pain, there is observed a local rise of a quarter, half, or even one degree centigrade above the normal temperature of the region. This local rise may, indeed, reach the level of the axillary temperature, which, under normal circumstances, is a degree and a half higher than that of the epigastrium or the right hypochondrium. This fact was first brought to the notice of the profession by Prof. Peter, at La Charité, in whose service the author had, in March, 1883, the opportunity of observing an interesting case, of which the following particulars are stated. A young woman, confined for two or three years to bed by disease of the spine, was seized during her sojourn in the hospital, and at the end of the second year of decubitus, with a paroxysm of biliary colic, which was speedily followed by others of a like kind, one of which was attended by jaundice. The trace which displayed the axillary temperature, that of the left hypochondrium, and that of the right hypochondrium, during a period of three months, demonstrated—1, a constant parallelism between the elevation of the axillary temperature and the elevation of that of the right hypochondrium; 2, in the periods in which the attacks of biliary colic were absent, the tendency to a uniform temperature in the two hypochondriac regions, sometimes with-

out appreciable difference, sometimes with a variation of a quarter- or a half-degree C.; 3, during the paroxysms, the temperature of the right hypochondrium was higher than that of the left to the extent of 1° to 1.3° C. It sometimes attained, and on one occasion even exceeded, that of the axilla. In a second case, where the focus of pain was in the epigastrium, the temperature at this point, which had been 36.1° , rose to 37.8° and 37.9° , while the axillary temperature varied between 36.6° and 37.5° . In a third case, characterized by violent and frequent, almost quotidian paroxysms, the temperature of the right hypochondrium almost always exceeded that of the axilla of the same side. This element of symptomatology heretofore overlooked, M. Cyr has, on several occasions, studied, with the result of fully confirming the observations of Prof. Peter. He has, further, found the difficulties attending the application of the surface thermometer, under the circumstances, less serious than he was at first led to expect that they would prove. Pain constitutes the essential element of the paroxysm of biliary colic. Other phenomena accompanying it are accessory, and may all be absent in particular cases, for their presence is dependent upon circumstances not at all necessary to the paroxysm. To this general statement, however, it appears that an exception may now be made in favor of the local elevation of temperature. This, in the absence of any cause beyond the paroxysm adequate to explain it, constitutes an important element of diagnosis, especially when we consider that in gastralgia and intercostal neuralgia—maladies in many respects closely resembling the attack of hepatic colic—local elevation of temperature does not occur.

PARALDEHYDE AS A HYPNOTIC.

Further clinical observations tend to define more closely the therapeutic applications of this drug. Less widely useful than chloral, it induces sleep in the same class of cases, and occasionally where chloral in reasonable doses has failed. It is available where chloral is inadmissible, either because not well borne, or—and this is more common—where the development of the chloral habit is to be dreaded.

Paraldehyde, so far as is yet known, excites no especial morbid craving for the repetition or increase of the dose, and

cannot be secretly used, on account of its strong, penetrating, ethereal odor, which pervades the apartment and lingers for many hours upon the breath.

The repugnance excited by this odor, together with inability to retain it on the part of persons of delicate stomach, constitutes the chief difficulty in its administration. This difficulty has disappeared in several cases upon repeated administration. In doses ranging from xxx to xlx , it does not greatly depress the forces of the circulation. I have observed in several instances diminution of the frequency of the pulse, which, however, proved to be of transient duration.

Paraldehyde may, I think, be safely employed in a large class of cases characterized by weak heart, in which chloral is on that account contra-indicated. It is a pure hypnotic, and possesses but feeble anodyne properties. It is therefore indicated in the wakefulness of intense emotional states, such as follow excitement and prolonged watching, or accompany grief, anxiety, and the like; also in the insomnia of aged persons and that of certain forms of mental disease, and in hysteria. I have used it in the wakefulness of acute alcoholism with success where chloral failed. It is less useful, but still of value, in the sleeplessness of acute diseases, as in pneumonia, bronchitis, and enteric fever. In painful inflammatory affections and in neuralgia and rheumatism, where sleep is kept at bay by suffering, paraldehyde is inferior to the preparations of opium.

The price of paraldehyde has, in consequence of increased demand and production, fallen almost forty per cent.

UNRECOGNIZED, OR MASKED, CEREBRAL TUBERCULOSIS.

J. S. Bristowe, in an interesting and suggestive practical paper (*British Medical Journal*, April 26, 1884), calls attention to a group of fatal cases coming under his observation, in which the presence of tubercles in the brain or its membranes was concealed or rendered doubtful during life in consequence of the association therewith of other diseases which seemed adequate to explain the patient's symptoms, or in which the apparent cause of cerebral symptoms might have been taken to exclude the possibility of their dependence on tuberculosis.

These cases numbered in all five. The first two cases were children, who, supposed to be perfectly healthy at the time, received blows on the head which were immediately, or almost immediately, followed by cerebral symptoms leading to death at the end of about three weeks.

Case I.—A boy aged 10 appeared to be in good health up to May 30, when he received at the hands of his schoolmaster two or three blows upon the side of the head.

Shortly afterwards he complained of headache, was sick, and went home. From that time until June 17, he suffered more or less constant pain in the back of the head and neck; he was frequently sick; there was a marked tendency to constipation; and he lost flesh and strength. His pulse was observed to be slow, and his tongue clean. He had no fit. On the 17th he passed into a state of partial coma.

He continued in this condition, with symptoms of basal meningitis, until the afternoon of June 21, when death took place. The post-mortem examination was made on the 22d. The body was emaciated. On removal of the skull-cap, the surface of the brain was found flattened and dry, and the pia mater uniformly and much congested. There was slight inflammatory thickening along the intergyral spaces and large vessels. A good deal of inflammatory deposit occupied the conflues at the base of the brain, and numerous small but distinct tubercles were scattered over the medulla oblongata and pons Varolii, about the circle of Willis, and along the fissures of Sylvius. There was great excess of fluid in the lateral ventricles, with much congestion and thickening of the velum interpositum and choroid plexuses, and abundance of tubercles in the velum. The brain-substance was fairly healthy. There was no evidence of injury to the bones of the skull or to the soft parts within. The lungs, pleuræ, heart, and pericardium were free from tubercles, and healthy. The abdominal organs were not examined.

Case II.—A boy $2\frac{1}{2}$ half years old, previously in good health (except the occurrence of two convulsions at eighteen months, which were attributed to teething), fell down-stairs on March 21. He soon recovered from the immediate effects of the fall, and appeared quite well for two days. The third night he was sick. The next day he ran about, but he was feverish and fretful, and still refused his food. He continued in much the same state for the next fortnight, suffering especially from loss of appetite, sickness, and constipation. On the 31st he took to his bed, and from that time till his admission he passed his evacuations involuntarily. On April 7 he had a fit, attended with loss of consciousness, distortion and lividity of face,

and convulsive movements of the hands. He remained unconscious, with Cheyne-Stokes breathing and repeated convulsions, until his death, on April 10.

Necropsy.—The convolutions of the brain were flattened, and the surface dry. There was a little recent lymph in the subarachnoid tissue at the base; and numerous gray tubercles existed about the fissures of Sylvius, crura cerebri, and pons Varolii. The brain-substance generally was healthy, and was free from tubercular deposits. The ventricles were distended with serous fluid, and the white matter around them was softened. There was an encapsuled calcareous mass in the apex of the left lung, and a few miliary tubercles in its neighborhood. Miliary tubercles were also found in the liver and spleen. All the other organs were healthy.

In commenting upon these two cases, Dr. Bristowe calls attention to the following points:

They were, apart from their apparent causes, ordinary cases of tubercular meningitis, and would naturally, by most medical men, have been regarded as such during life. At the same time, they were attended with some obscurity, and there were grounds for entertaining different opinions with regard to them. In both of them, and especially in the first, the symptoms followed so immediately on the blow that it was difficult not to believe that the cerebral mischief was due to the blow; in neither of them was there any clinical evidence whatever of abdominal or thoracic tuberculosis; in neither of them was there any paralysis of the ocular or other cerebral nerve, which is common in inflammations at the base of the brain; and, in the only one examined ophthalmoscopically, the optic disks were healthy; but, on the other hand, there were no signs whatever of disease of the ear, or any evidence of damage to the skull. The post-mortem examination in each case revealed, as was anticipated, the presence of tubercular meningitis, but it showed also that the tubercles were few in number and small in size, and that the tubercular affection was therefore in an early stage. There is no reason to suppose that the tubercular deposit was caused by, or even supervened on, the blow upon the head. Doubtless the natural course of events in each case was, first, the deposition of tubercles, unattended with marked symptoms or obvious deterioration of health; and, secondly, the supervention of inflammation and drowsiness excited by the local injury, to which, and

not to the tubercular deposit immediately, the patient's symptoms and death were due. It is probable that in all cases of cerebral tuberculosis the early stage of tubercular deposition is unattended with symptoms, and that it is only at a later period, when the tubercles either have attained considerable bulk, or have implicated specially important parts, or have become associated with inflammatory mischief, that such cases are recognized clinically as cases of cerebral tumor or tubercular meningitis.

The next two cases were instances of disease of the internal ear, in both of which cerebral tuberculosis was discovered after death, but in neither of which was the presence of this complication suspected during life; in the first, because, as a matter of fact, there were no symptoms to justify any such diagnosis; in the second, because—although the child's symptoms were exactly such as might be caused by tubercular meningitis—the history and presence of ear-disease caused them to be attributed to brain-mischief secondary to this affection.

Case III.—A girl, aged 2½ years, had suffered from measles and whooping-cough, and from a discharge from the left ear of a year's duration. Her face suddenly became drawn to the right, without earache or other obvious cause. She had no headache, drowsiness, squinting, or vomiting. She had cough, and occasional coarse crepitation over both lungs. At the end of a month she died of exhaustion, following symptoms of pulmonary tuberculosis, and without other cerebral symptoms than occasional drowsiness.

Necropsy.—The body was much emaciated. The dura mater was firmly adherent to the skull, especially in each temporal region. That over the left temporal bone was a little thickened; and there was a slight amount of inflammatory lymph between it and the bone in this situation. The convolutions were flattened. There was no congestion or inflammation of the pia mater, and no appearance of miliary tubercle. The substance of the brain was soft, and the lateral ventricles contained a large quantity of serous fluid. In the right superior parietal lobule was a caseous tubercular mass as large as a small walnut; this was embedded in the brain-substance, and extended almost to the outer edge of the lateral ventricle. Two similar masses, each of the size of a pea, were found in the left occipital lobe, at its extreme posterior edge. The left temporal bone, at the junction of the squamous and petrous portions, was superficially carious, granular, and presented pinhole perforations. The external surface of the temporal bone, adjacent to the attachment of

the pinna, was in a similar condition. The external meatus was completely bare and carious. The aquæductus Fallopii was involved in the carious and necrosed bone, and the facial nerve was destroyed. There were no traces of the auditory ossicles. The carotid canal and jugular fossa were not affected. The lungs were adherent by old adhesions, and thickly studded with caseous masses. In the apices were many small cavities. The bronchial glands were enlarged and caseous. The mesenteric glands were caseous. The remaining organs were generally healthy.

Case IV.—A girl, aged 9, was admitted with the history of a fall at the age of two and a half, which resulted in serious injury to the spine and permanent angular deformity in the lumbar region. Three years before admission she had scarlet fever, since which time she had been deaf and had had a discharge from her right ear. Two weeks before admission an abscess broke in this ear, and there was an offensive discharge from it up to the 6th of April. The patient was frequently sick from the commencement of her illness up to the same date, but she continued to run about and play as usual. On the evening of the 7th she had an epileptiform fit, and on the 9th she became so ill that she was brought to the hospital. She suffered from severe headache; both external recti acted imperfectly, as also did the right superior rectus and levator palpebræ. Both pupils were dilated, but the right was the larger. The *tache cérébrale* was well marked. The hydrocephalic cry was frequent. The tongue was coated; there was no sickness; the bowels were confined. The urine was retained, and had to be drawn off by the catheter. There was no affection of the chest. On examination of the right ear, perforation of the membrana tympani was discovered, but no discharge. It was assumed, however, that the child was suffering from cerebral complication of ear-disease, and six leeches were applied to the mastoid process. The temperature to-day varied from 102.2° in the morning to 100° in the evening.

April 11.—The child gradually became comatose, with stertorous breathing, very feeble pulse, coldness of limbs, and falling temperature. When death occurred, in the course of the morning, the temperature was a little below the normal.

Post-Mortem Examination.—The dura mater and skull were healthy. The surface of the brain was flattened and somewhat dry, and the pia mater was a little congested. The membranes covering the medulla oblongata, pons Varolii, crura cerebri, and parts between these and the lamina cinerea were thickened, rough, and studded with a small number of minute gray tubercles. The surfaces of the fissures of Sylvius were adherent, and also presented a few small tubercles. The presence of these bodies was confirmed

by microscopic examination. There was very little fluid in the ventricles, which were not at all distended. The substance of the brain was wet, but otherwise healthy. The fornix was somewhat softened. The vessels at the base were healthy. The sinuses were all healthy. The affection of the ear had not extended to the surface of the petrous bone, and there was no disease whatever in the dura mater covering it. The only other morbid conditions discovered were some caries of the lumbar vertebræ and a double psoas abscess.

The fifth of this series of cases, too long to quote here, was that of a girl, aged 7, suffering from caries of dorsal vertebræ, who was admitted to hospital on the 17th of March on account of abscess in the left temporal region, with protrusion of the eyeball, consequent upon caries of the sphenoid bone. Death occurred August 1.

Post-Mortem Examination.—The body was much emaciated. The left eyeball projected. There was ecchymosis of the corresponding upper eyelid. The left temporo-sphenoidal lobe of the brain was firmly adherent to the greater wing of the sphenoid bone and to the posterior border of the lesser wing. The arachnoid at the base of the brain was a good deal thickened, and of an opaque-yellow color. Surrounding the vessels of the base, and especially along the fissures of Sylvius and connected with the duplicatures of pia mater in the adjoining sulci, were numerous minute gray tubercles. There was great increase of subarachnoid fluid, but in all other respects the membranes were healthy. The ventricles were slightly distended with fluid. The substance of the left temporo-sphenoidal lobe was considerably softened, and was readily broken up by a stream of water. But there was no abscess; and the brain-substance, with this exception, was healthy. The nerves at the base were apparently healthy. In the left orbit, the upper and outer osseous boundary (including the orbital plate of the frontal, the greater wing of the sphenoid, and the orbital portion of the malar bone) was partly stripped of periosteum, carious, and bathed in a considerable accumulation of thick matter. There was also a collection of cheesy pus under the left temporal muscle, connected with denudation and caries of the portion of the sphenoid here situated.

In this case, caries of the vertebræ and of certain of the bones of the skull was discovered post mortem, as had been expected. There was also some inflammation of the portion of the brain in relation with the carious bone; but, further, there were miliary tubercles (scarcely tubercular meningitis) in the usual situation at the base of the brain.

Their presence had not been suspected, and probably had had no influence on the patient's symptoms, or on the event of the case.

These cases appear to the author of the paper to illustrate the fact that there is a period in the early progress of cerebral tuberculosis in which the presence of cerebral mischief is not revealed by symptoms; and that the symptoms which attend the presence of meningeal tubercles are, for the most part, due less to the tubercles themselves than to the inflammation which sooner or later accompanies them. They suggest the very important question whether or not the progress of cerebral tuberculosis, like that of pulmonary tuberculosis, admits of being arrested; and whether the cure of tubercular meningitis—that is, of tubercle with its inflammatory complication—is within the range of practical therapeutics. The difficulties in the way of the solution of this question are very great, at present insurmountable. Dr. Bristowe lays serious stress upon the facts that tubercular tumors are, judging from their clinical history, often very chronic in their progress, extending, it may be, over several years; and that occasionally the membranes of the brain seem, judging from post-mortem examination, to be the only part of the body affected with tubercle. Both of these facts may be regarded as comprising an element of hope as to the latter half of the question.

Patients are not unfrequently met with in whom the history and symptoms render it almost certain that they suffer from tubercular meningitis, but in whom recovery ultimately occurs. That such patients recover from meningitis of the base is certain; but whether from meningitis the consequence or the accompaniment of tubercle, there is no opportunity of placing beyond doubt.

He concludes his valuable paper with the remark that, "at any rate, the belief that we may, even though very rarely, check the progress of cerebral tubercle, and cure the inflammation of tubercular meningitis, is calculated to encourage us in our dealings with such cases, and to justify us in persisting in reasonable treatment, and in hoping against hope."

SALICYLATE OF SODIUM, when administered in large and repeated doses, has been followed by metro-neuralgia.

ACID CALCIUM LACTATE.

BY J. E. GARRETSON, M.D.

THE practical adaptation to daily life of scientific knowledge is a good application so far as the use and comfort of men are concerned. The cheapening of things as to production seems also to be a good to people at large, and not of true detriment to anybody in particular.

Acids, which are used widely in the arts, and which more and more show themselves as instruments of great service in medical practice, are just now receiving at the hands of chemists an attention of not less practical than of scientific import.

The object of the present communication is to direct notice and to afford credit to improvements made by Mr. Charles E. Avery in procuring and cheapening the acid lactate of lime, as explained in a paper read by him before the Boston Society of Arts at a late meeting. That Mr. Avery's work be properly understood, an excerpt is presented from his paper.

"The acids employed in the arts," he says, "have been greatly cheapened and improved by chemical study. As a notable instance, allow me to call to your notice oxalic acid, at first procured from plants, afterward more cheaply by the reaction of nitric acid upon sugar, and finally with great cheapness by treating sawdust with caustic alkalies at a baking heat.

"Apart from the chemical uses of the acids, as in dyeing, bleaching, metallurgy, etc., there is another set of uses, as in food and drink. In this field the industrial improvements have not been of so striking a nature, and, as a result, the food acids, citric acids (citric and tartaric), remain high in price.

"Seeing that this field remained unoccupied, I was early attracted to it, and in 1873 noted down as a chance idea the substitution of acid lactates for acid tartrate of potash, which is the old familiar cream of tartar."

After a consideration of the theory of lactic-acid fermentation, and the discovery by Pasteur of an organized ferment as its cause, he discusses several methods which have been proposed for manufacturing lactic acid commercially, and gives his own process, as follows:

"The process I adopt resolves itself into three portions: 1, manufacture of solution for fermentation; 2, the fermentation;

3, the purification; and, lastly, there is the use of the product itself as a separate consideration.

"I mix 80 to 160 pounds of oil of vitriol with 2000 pounds of cold water, and stir in 2000 pounds of ground maize; this corn-meal may be from inferior corn, from corn more or less heated, soured, or otherwise changed. The average price of corn of good quality here is about one cent per pound, and much less in the West. Inferior qualities are of less cost. The vitriol can be bought at 1½ cents per pound by single carboy, and would cost much less if chamber acid were used and made on the spot.

"I let the meal-mixture stand overnight, and next morning add, in portions, 2000 pounds of boiling water. After boiling until the tests are satisfactory, I run the hot mixture into the fermentation-tank, and neutralize with 1000 pounds carbonate of lime, stirring well. The carbonate of lime is, of course, in large excess. I then add 4000 pounds cold water and a variable amount of lactic ferment; one or two per cent. seems to answer well, although a larger quantity induces fermentation more speedily, saving perhaps half a day, but less will suffice.

"In a day's time the most vigorous action ensues, the carbonic acid released from the carbonate of lime escaping in large bubbles, giving the impression that the liquor is boiling. In three or four days' time, with good lactic yeast, the mass sets into crystals of lactate of lime, resembling thick mortar. I then dissolve the lactate in hot water, filter it, crystallize, press and purify, much as in other processes, with two contractions, however. I use animal charcoal to remove odor and color, and, after acidulation, distil off the butyric acid that has been formed. By more vigorous precautions in the fermentation, I expect soon to be rid altogether of the butyric ferment.

"From experimental results already obtained on the small scale, I have reason to believe that I can reduce the waste and cost of purification, especially in the direction of animal charcoal, and experiments will speedily be resumed in this direction. I am much assisted in this search by the comparatively clean, pure crude material with which I start, unlike the foul mass obtained by other processes of practical value. . . .

"As to the value of lactic acid and acid lactates in raising bread, as substitutes for cream of tartar, there can be no question, for sour milk always has raised bread, and made good bread, and cream of tartar is a recent substitute for lactic acid, rather than lactic acid a substitute for it. At present prices of milk, the cost is greatly reduced. The corn is not fed to the cow partly to be wasted in maintaining heat and life and partly to be returned as fat and decomposed sugar, but, by a simple change, turns almost completely to lactic acid. In one respect, however, I think an advantage may be fairly claimed for the acid lactate of lime over cream of tartar,—namely, it will be hard for any cook, no matter how careless, to make either sour bread or alkaline bread; and every cook has such failures with cream of tartar. In cream of tartar, or acid tartrate of potash, the acid molecule reacts on the saleratus to free the gas; unless the exact proportions be hit and the mixture be complete, the bread is alkaline wholly or in spots if the saleratus be in excess, and sour if the acid tartrate be in excess. In the acid lactate of lime, in like manner, the acid molecule reacts to free gas from the saleratus. The neutral lactate of lime left by the reaction again acts on the saleratus, forming lactate of soda, carbonate of lime, and free carbonic acid. Hence we have a wide range of proportions in which the bread can be neither acid nor alkaline.

"This carbonate of lime is itself a guard against acetous fermentation or souring of the bread, and can hardly be objected to, as Liebig has recommended lime-water to be used in bread-making, partly to add the lime-salts taken out by bolting, partly because it improves the quality of the bread and its appearance."

He then exhibited a specimen, which showed that the acid lactate is a permanent salt, not readily changed to butyrate, not deliquescent, and not too gum-like to resist powdering.

In conclusion, he stated that he had rid himself "fully of the notion that starch, dextrine, and other carbo-hydrates undergo directly a true lactic fermentation.

"In Miller and other works of good standing it is stated that raw corn-meal under like conditions had but partly changed into lactic acid in forty days. Technically speaking, corn-meal cannot furnish lactic acid unless the starch be first transformed.

Nor will it then give lactic acid in quantity unless the albuminoid matter be either added or left in the presence of the nitrogenous phosphatic salts of the neutralizer of the ferment; but even this is not a fulfilment of all the conditions for large and varied yield; we must have albuminoid matter present. It has been fully shown that it is not essential that this albuminoid should be rank or putrid, but that better and quicker results were obtained with fresh vegetable albuminoids than with stale animal albuminoids. I have improved the purification by the introduction of animal charcoal and distillation, and have made the operations inoffensive. With regard to cheapness, little needs to be said. With a yield of lactic acid equalling fifty per cent. of the weight of corn employed, with meal at one cent per pound, chalk or whiting at seven-eighths of a cent, and sulphuric acid at 1½ cents, coal being assumed at \$6 per ton, the cost of materials for one pound of lactic acid is about 4½ cents."

Lactic acid at four and a half cents a pound takes away from the druggists all excuse for charging that many dollars for the same quantity when prescriptions for the medicine come to them.

It is, however, most particularly as Mr. Avery's work furnishes a baking-powder of a character absolutely reliable, both as health and bread-raising are concerned, that the discovery is to be greeted and its author accorded credit. It is certainly not unknown to housekeepers that demerit as to overlightness or overheaviness in bread is invariably attributed by cooks to lack of reliability as to the material used in the raising, and this, it would seem, not at all unjustly, as inquiry in this direction, made of reputable professional bakers, discovers here similar complaint.

Mr. Avery, after a multitude of experiments, professes to have finally succeeded in formulating a combination for a bread-raiser which can be accepted and recommended as absolutely reliable; this formula being as follows: Mix thoroughly sixty-two and three-tenths parts acid calcium lactate, twenty-four parts bicarbonate of soda, and thirteen and seven-tenths parts flour that has been made thoroughly dry. Of this combination two heaping teaspoonfuls are used to the quart of flour.

In communication with President Thompson, of the Rose Polytechnic Insti-

tute, I find a satisfaction expressed by him arising out of a repetition of Mr. Avery's experiments. "Corn meal," says Prof. Thompson, "is fermented in covered wooden tubs, in the presence of pure carbonate of lime, by the agency of water and a certain portion of lactic ferment. The form of lime used is lixiviated whiting. The lactic ferment is bred substantially in the manner which is described by Gmelin, Wöhler, Beilstein, and others, with certain modifications in manipulation; but nothing enters the 'fermenting-tub' other than the natural products of the lactic fermentation in the presence of lime. What comes out of the tub is normal lactate of calcium mixed with sundry impurities arising from the unfermentable part of the meal, etc., which impurities, being insoluble, are removed by filtration. The filtrate is a clear solution of normal calcium lactate, from which the salt, after concentration, readily crystallizes out. If, now, to a solution of this salt at the proper temperature enough dilute sulphuric acid be carefully added to combine with one-half the lime-radical, gypsum will appear as a precipitate and *acid* calcium lactate remain in solution. The solution when concentrated and then cooled will deposit the salt in crystalline masses. This salt reacts easily with sodium carbonate to form a calcic sodic lactate, and in so doing evolves carbonic acid gas. Hence its usefulness as a baking-powder. In making up the baking-powder, mix thirteen parts, by weight, acid calcium lactate with five parts bicarbonate of soda."

In Mr. Avery's combination the profession will accept a preparation which, at a present view, seems to be without objectionable qualities; on the contrary, one that, if it do anything outside of its work as a bread-raiser, lends assistance in the way of digestion.

1537 CHESTNUT STREET.

TRANSLATIONS.

THE CULTIVATION OF VACCINE ORGANISMS.—Extremely small micrococci have often been found in vaccine lymph, but all attempts at their artificial cultivation, so as to enable reproduction of active vaccine matter, have, until now, failed. Dr. Quist, of Helsingfors, has, however, succeeded in the solution of this problem,

and has found that their cultivation is only possible in certain culture-fluids when in contact with the atmosphere. In closed capillary tubes no reproduction takes place. The culture-fluid must contain albumen, must be alkaline in reaction, and must be sterilized by warming up to 60° C. every one and a half hours for three days. The best fluid he found to be ox-blood serum, glycerin, and distilled water, of each one part; calcium carbonate one-nine-hundredth part. The culture-fluid is placed in open watch-glasses, under a moistened bell-jar, at 18°–21° C., and a small piece of washed vaccine pustule (one from the eighth to the tenth day) inserted in it. After a few days the upper surface of the fluid possesses the properties of the vaccine lymph, and, after eight or ten days, by oblique illumination it can be seen that the entire fluid is filled with little clumps, which, however, have no tendency to unite with one another. A few days later a gray, pulverulent mass, consisting of innumerable micrococci, settles to the bottom. Inoculation with this fluid, after six days' culture, forms a perfect vaccine pustule.

As regards the protective power of this cultivated lymph against smallpox, of course as yet no proof can be offered; though the fact that in a child a normal pustule was produced by this lymph, and that subsequent vaccination with natural lymph from another child failed to produce any results, furnishes strong presumptive evidence in favor of the protection conferred by the artificial lymph.—*Centralb. f. Chirurgie*, March 15, 1884. s.

POLYPI OF THE LARYNX IN AN INFANT.—Jules Simon reports a case of an infant brought to the Children's Hospital suffering with intense dyspnoea and tracheal whistling so marked as to make it appear like a case of croup. The duration of the attack, however, would not permit this diagnosis, and it was regarded as one of pressure by enlarged glands upon the trachea and bronchi. The child subsequently died of diphtheria, which it was thought to have acquired in the hospital. At the autopsy, a number of papillary growths were found in the larynx. The importance of laryngoscopic examination in such cases is very obvious.—*Journal de Médecine et de Chirurgie pratiques*, January, 1884.

PHILADELPHIA
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PHILADELPHIA, MAY 31, 1884.

EDITORIAL.

HOSPITAL PHYSICIANS AND PAY-PATIENTS.

IN an address just published,* Dr. William Hunt, among other topics of interest, incidentally discusses the perennial problem of the relations of the members of the unpaid medical staff and the pay-patients coming under their care in the course of hospital service. Although the practice prevailing in most hospitals is to consider that the services of the physician are due to the institution, and that, when he sends a patient into the wards, he must resign all claim for remuneration for medical attendance rendered during the time that the patient is in the hospital, this position is criticised, and condemned as highly unjust to the physician, by Dr. Hunt, who maintains that rich patients should pay not only their board, but also their doctor. He says, with a good show of reason, "Provided that the hospital does not suffer in purse, but rather profits, as it should do, by taking them, it is nobody's business as to the private relations and understanding existing between them and the physicians and surgeons of the visiting staff whom they may have chosen for advisers or operators."

The legitimate extension and application of the idea that rich hospital-patients should not pay for medical advice, Dr. Hunt thinks, would lead to the formation of joint-stock hospitals, where everybody would be remunerated except the doctors, who would be simply robbed. Another natural result, in our opinion, which may

already be seen in our large cities, is the multiplication of private hospitals and private dispensaries, by physicians and surgeons who have enough independence, enterprise, and energy to establish them in competition with the lay hospitals.

The injustice of the prevailing method of commanding the time and services of the attending physician for the benefit of the better class of patients is very manifest, and it doubtless has had the effect of keeping patients out of the hospital who would have been better cared for in the wards. In the St. Joseph's Hospital, of this city, a patient can employ his own physician. In the German Hospital and the Jefferson Medical College Hospital, the medical staffs enjoy the right of sending patients into the wards, and as long as the fixed charges for treatment are paid, the private agreement, for remuneration for services rendered, between the patient and his physician is not inquired into. It is considered that with this the hospital authorities have nothing to do. But even this arrangement does not include patients who apply directly to the hospitals even though they are abundantly able to pay for medical services. Some such plan, we submit, should be generally adopted in justice to the medical attendants. Any abuses to which it may be subject will be discovered and corrected by experience; certainly the abuse could scarcely be greater than that under which the medical profession is now laboring. In fact, the profession is itself largely responsible for the want of consideration shown it by non-medical boards, for the undignified eagerness displayed in efforts to obtain hospital appointments is so great as almost to justify the popular opinion that the hospitals pay a salary to their medical officers. Unfortunately, this is not their practice; but that, wherever they are not strictly eleemosynary, physicians should be remunerated, is a matter about which there can be no difference of opinion.

* Proceedings of the Alumni Society of the Medical Department of the University of Pennsylvania, with the Annual Address by William Hunt, M.D. Philadelphia, 1884.

MEDICO-LEGAL NOTES.

THE tendency of the courts has been in recent years to limit the exemption from punishment in case of persons possibly insane, and this is noticeably so since the assassination of President Garfield.

If a person can understand the relations of right and wrong, even if his mind be unbalanced, if not positively insane, on some points, the courts will not now direct an acquittal.

A fair statement of the general application of this rule is found in a case just reported in a Western State. It was here held that "if, at the time a deadly assault is made by a defendant, he knew that it was wrong to commit such an act, and had the power of mind to choose either to do or not to do, and of controlling his conduct in accordance with such choice, he will be held amenable to the law, although he was not entirely and perfectly sane; and it is no error to so instruct the jury trying him for the offence."

It will not be a matter of great sorrow to the regular profession to notice that the venders of patent medicines frequently get into trouble over the question of rival trade-marks, or some other feature of the manufacture of their nostrums.

In a case not long since in the Supreme Court of the United States, between the Manhattan Medicine Company and a man named Wood, it was held that there could not be any valid trade-mark which did not state the exact truth as to the article intended to be protected. It appeared that the nostrum claimed to be "Atwood's Quinine Physical Jaundice Bitters," and to be manufactured by Moses Atwood, Georgetown, Mass. In fact, Atwood was either dead or had long since ceased to manufacture the medicine, and had sold out to the Manhattan Medicine Company, which manufactured the medicine at New York. Under these circumstances, the court held that no protection could be

extended as against persons who closely imitated the label.

In a still more recent case in the Maryland Court of Appeals, the contest was over an imitation of the label on a preparation called "Aromatic Bitters, or Angostura Bitters, prepared by Dr. Siegert at Angostura (now Port of Spain), Trinidad." It was proved on the trial that Dr. Siegert died in 1870, and that a firm was manufacturing the medicine at a place where he never lived. It also appeared that the cover contained a warning against counterfeiters, stating that the signature attached was that of the manufacturer, Dr. Siegert, who had been dead some years in fact. These circumstances showed the plaintiffs to have put forth untruthful statements themselves, and the court refused to help them against persons who also claimed to manufacture the real and genuine "Angostura Bitters."

HYGIENE OF PUBLIC SCHOOLS.

WHILE great care has been bestowed upon the sanitary arrangements of prisons and legislative halls, the needs of the school-children (some of whom probably may have the good fortune to grow up to be criminals or politicians) for fresh air seem to have been very generally ignored or forgotten. As the result of a visit of a member of the Board of Education to some of the school-rooms in Philadelphia, public attention has been called to the matter. The light in sixty-six per cent. of the rooms visited was arranged so as to glare in the faces of the children, the rooms were overcrowded, and in ninety-five per cent. whatever pure air found its way into the rooms had to be admitted through the windows or doors. In many schools the latrines are too near the school, and are usually kept in a foul condition. Since the agitation of the subject, two schools have been closed as unfit for use, and, if Mr. Spangler's convictions are well

founded, many others should be made to close their doors. If there were more willingness among physicians to serve on school boards, coupled with a determination to do their duty without fear or favor, a great many of these abuses might be prevented.

MEMBERS BY APPLICATION IN THE AMERICAN MEDICAL ASSOCIATION.

BY the adoption, on the last day of the session, at Washington, of Dr. Packard's amendment to the Constitution, a new class of members of the American Medical Association was created. We are notified by the Permanent Secretary that any one in the profession who presents his application with the certificate signed by the officers of a local medical society recognized by the National Association, that he is a member in good standing in said society, can become a "Member by Application" on applying to the Secretary. This, we believe, confers all the rights of membership now enjoyed by permanent members of the Association.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

SPRING is here, after a brief but sharp spell of severe northeasterly winds, which carried off the very old people like flies in autumn. Kingsley loved the east wind, just as the Norsemen did; but the Norsemen were not troubled with livers, at least so far as our records go, and the east winds wafted them to their western neighbors. If they were proud of the northeaster, it is more than their degenerate offspring are at the present day. The sharp winds brought out strongly an important clinical fact: there are livers—and livers. One liver becomes upset by a low barometric pressure and a warm wind, as was seen at Christmas; while another liver gets on very well under these circumstances, but becomes deranged when the nor'easter blows. With this latter it is that there is so much failure of nutrition in the case. The liver seems smitten with palsy as regards its func-

tion of the elaboration of albuminoids,—i.e., the albumen coming to it by the portal vein is not elaborated into the serum of the liquor sanguinis, and so the tissues are ill nourished. The waste products of albuminoids, the bile-acids and urine-solids, are found in great quantities. When the assimilating powers of very old people are impaired by age, and the nor'easter comes smiting the liver, then they die off swiftly, but without much constitutional disturbance, like snow melting in a warm wind. Consumptives die "in the bud of the leaf," apparently for the same reason, and all invalids (as a rule) are acted upon injuriously. Tongues with a brownish-yellow shade upon them are common; people have a bad taste in their mouths on waking in the morning,—the bad taste of physical origin from a disordered liver, not the psychical bad taste of an offended conscience, though conscience does seem quickened by the despondency which is an outcome of cholæmic blood-poisoning. Whether the east wind prepares the pious mind for the May meetings of Exeter Hall or not may not be affirmed; but sickness is linked with repentance. "So long as a man is well, he does not repent of his sins; but when he falls ill he becomes sorry for what he has done," remarked Dr. Hughlings Jackson to me some time ago, in speaking of "The Pathological Relations of Sin," or rather of "the Sense of Sin." And we all remember the lines,—

"The devil was ill, the devil a saint would be;
The devil got well, the devil a saint was he."

The pious of evangelical leanings are said to overeat themselves; and, if this be true, "liver-failure" may fitly precede May meetings. The charge of gross feeding against the pious is still urged, as of yore.

"Would you enjoy soft beds and solid dinners?
Then, gallants, board with saints, and bed with sinners."

Such, it seems, is the order of things yet. These relations of the liver to the mood or disposition form one of the problems of medicine not yet worked out, as it may be some day when the practice of physic embraces something more than the physical examination of the chest and the testing of the urine for sugar and albumen,—two important matters enough in their way, and not to be spoken of lightly, certainly.

The great event in the medical world recently has been, not the Medical Bill,—it seems to attract little notice,—but the tercentenary of the University of Edinburgh. The position of the University of Edinburgh has been a peculiar one. When medicine died down at the two great English Universities, the would-be graduate in medicine betook himself to Pavia or Montpellier, if possessed of the means; if not, he graduated in medicine at Edinburgh. In the earlier part of the century most of the graduates in medicine in London were Edinburgh gradu-

ates. Besides classics, rhetoric, divinity, and law, the University of Edinburgh taught medicine, and taught it efficiently, too. Cullen, Craige, Abercrombie, Alison, the Munros, the Gregorys, and a host of minor lights kept the lamp of medical teaching burning brightly in the modern Athens. Not only did a steady stream of graduates, leaving their native Caledonia, "stern and wild," hold southwards to revenge King Edward, Flodden Field, Pinkie Cleugh, Dunbar, Sheriffmuir, and Culloden on "the false Southron," but a great many Englishmen went North to obtain the coveted degree, with which they posed successfully on their return to their Southern home as "Doctors in Medicine," as compared to the mere "Members of the College of Surgeons" or "Licentiates of the Apothecaries' Hall" around them. Three hundred years have elapsed since the Scottish Solomon built the Edinburgh University, on the site of "Kirk i' the Fields," where his father perished, and of course the heart of Caledonia warmed to the momentous occasion, and forgot all about the attempt to force Episcopacy upon them in the days of Stuart tyranny. The young university soon outgrew in favor the older universities of Glasgow, St. Andrew's, and Aberdeen, which date back to Catholic times. This was the child of the Reformation, and built in the style of the Renaissance. "The First Book of Discipline" came into being about this time, and the Scotch have given themselves to a rigorous rule of Kirk discipline, unequalled anywhere (unless it be in New England), even if their percentage of illegitimate births has been conspicuously high. The first principals, fortunately, were men of high character, and the fledgling went off satisfactorily. The principal was then the leading teacher, with "regent teachers" to help him. This scheme gradually gave way to professors, and of all the area over which English is spoken, nowhere else does a "professor" hold such an enviable position as at Edinburgh. Verily, in modern Athens it is a great thing to be a "professor." There are more sorts than one of "professor" up in the North, however, both with good opinions of themselves, both commanding high prices if taken at their own estimate of themselves. Well, be that as it may, a professor in the University of Edinburgh was somebody in the old days, and is somebody yet. Its medical professors have been men of eminence in the profession, and Sir James Young Simpson, the discoverer of chloroform, was a man of world-wide renown. Again and again has the University of Edinburgh been expanded to meet the waxing demands upon it, the number of its students steadily increasing.

As regards its medical students, a very large proportion now are English, and not from the north of England only, but from

other parts. Its other students are natives almost to a man. And pretty good men, too, are turned out from the Edinburgh school, and many of them doubtless share the sentiment given in the lines of Dr. Douglass MacLagan:

"I yet know not
Upon what spot
In practice I may settle,
Or if folks will see,
As they ought, in me,
A man of sterling mettle."

And go where they will, whether they stay at home, hold south, or go across seas, the Edinburgh graduates are able to hold their own, and usually somewhat more. The close propinquity of the Royal Infirmary to the University linked the two together, and no time was lost in getting from the one to the other. Five minutes did not elapse in passing from Simpson's silvery tones to Syme's manly speech.

A great improvement has taken place in the Edinburgh medical student since the Medical Act of 1858 required a preliminary examination to be passed ere entering upon a course of medical study. Before, every idle young scamp who had tired out the patience of his friends, and must reform as the purse-strings tightened, decided to be a medical student, and read up his Latin for the examination therein, which must be passed before any professional examination could be made. Perhaps in some instances the desired amendment of ways and practices followed, but, as a rule, the reformation was only in name, and these fellows only led other students from the path of rectitude. The act of 1858 made a clean sweep of these undesirable students, greatly to the advantage of the school. Now the students are a set of smart young fellows, bearing a much better reputation than adhered to their predecessors. A good deal, too, of the evil that existed was due to the fact that in Edinburgh students lived where they liked and lived as they liked. All that was required of them was class-attendance and the requisite information at the examination-table. Outside this no one asked any question, with the result that decent people gave a "medical student" a wide berth as soon as his position became known to them. Of course this did not help him much. Now he is admitted into good society and has the chance of associating with decent people. Snow-ball riots were common in the old days, and, when these rough young fellows were aroused, desperate fights with the city authorities took place. The last of the great riots was in January, 1860, since which date the "rows" have been on a less extensive scale.

One great advantage Edinburgh possessed as a teaching-place, and that was the feuds which existed betwixt the different professors and the tendency that prevailed to examine each other's views from a hostile stand-point.

Simpson waged war on Syme, who retaliated. J. Hughes Bennett scoffed at both, and sneered at everybody in a general way. Henderson, the learned professor of pathology, leaned to homœopathy, which drew upon him the animadversions of his colleagues. J. Hutton Balfour, the professor of botany and dean, probably had as deep an insight into the youthful heart as ever man possessed, and the most skilfully planned excuse ("an excuse is a guarded lie") fell dead on his ear. Nobody ever beguiled old "Woody Fibre," who was one of the best-hated men that ever breathed; though, as time went on, the feeling softened, and the whilom student began to see that "Old Woody was not such a bad fellow, after all." He and Bennett both had the habit of remembering a man's offences and misdeeds at the examination-table, which, if not quite fair, exercised a wholesome effect. Christison was as upright in mind as he was erect in figure,—and a grand figure he possessed, even when the weight of years was telling on his faculties. Old Johnny Goodsir, a tall, lean rail of a man, was a great anatomist, and respected by all. The professors of the present are mostly young, and therefore it is not fair to compare them with the giants of the past. Certain it is that, as a teaching machine, the medical professoriate of Edinburgh is unexcelled by any other in the world. When the time came, good Scotchmen gathered to the northern metropolis to see and be seen. Some English graduates paid no heed to the great doings of their Alma Mater, who to many of them is "an unmotherly old jade," who has precious little to give her graduates, and that little she often bestows upon strangers. Unless "in" with the ruling clique there, no graduate has a chance of an examinership, which is the best thing the old "Mater" possesses.

From far and near the Scotchmen gathered, and the sight of well-known faces, altered by years but not beyond recognition, was welcome to all. Honors were bestowed, of course, and the medical profession in the United States shared therein. A torchlight procession after the first conversazione was brought off successfully without row or mishap. Next day the medical faculty entertained some six hundred guests in the Anatomical Museum (one wonders if the sight around them in any way affected the appetite of those present). Then, in the afternoon, the students played "The King o' Scots," a piece founded on Scott's "The Fortunes of Nigel," out of compliment to the founder, King Jamie, of illustrious memory. And very well played it was, it seems. Then, in the evening, came a conversazione in the Library Hall, and a ball to finish up with. They seemed to have given their minds to the business before them in the way of pleasure. Next day came the conferring of honors. Then more eating. The final act was a students' symposium, or

"smoking concert." It was held in the Drill Hall, and some two thousand were present, and all joined in, juniors and seniors together, the older men forgetting the years that had elapsed since they were students and hobnobbing with their sons and grandsons. Tobacco-smoke filled the place, and the rattling of cups and the clinking of glasses was continuous, except when there was "silence for a song." The Lord Rector, Sir Stafford Northcote, a Conservative leader, made a speech, then Sir Lyon Playfair told a story. Some sang songs, especially Prof. Rutherford, a notable songster. They finished up with "Auld Lang Syne" and the national anthem. Very pleasant tales those present at this "smoking concert" tell of the way it went off. Indeed, the whole affair was a decided success, and those who took a share therein seem pleased with it and themselves. No doubt, with such scattered graduates, such a reunion was very agreeable. Graduates of Edinburgh have few ties binding them to their university. The Edinburgh University Club, in London, exercises little influence, for it only meets to dine together at stated intervals. When a man has passed at Edinburgh, his next business is to get away somewhere; for to stay in Edinburgh is probably to enter the severest contest for success in medical practice to be found on the face of the globe. A limited few hang about, in the expectation of some day being attached to the school, if not of mounting a professor's chair. The bulk seek their fortune over the face of the earth. A number come to London, despite the London University, and make their way slowly but steadily to the front. It was thought the London University would do away with the Edinburgh graduate in London, but here he is still, holding his own, perhaps even stronger than ever. He is usually not afraid of hard work, and is not afraid to bide his time,—and a long time it takes, he finds, to climb the ladder. If in general practice, he certainly succeeds, as he minds his business and attends to his practice,—ways conducive to success. If he aims at a consultant's position, he finds the Southron jealous of him and disinclined to lend him a hand, but he contrives to do without help. His habits are frugal, and he does not waste much of his time in playing cards, or much of his money either; for card-playing is not a Calvinistic institution. He minds his own business, and knows that success in life is attained by so doing, and, consequently, succeeds. But it is not in London alone, but all over the Edinburgh graduate is the same and prospers, unless he takes to whiskey in excess and to opium,—the two rocks on which these men especially split when they do come to grief, as some do. Edinburgh University is the largest contributor to the ranks of medicine of all our universities, the University of Dublin taking second place.

Aberdeen furnishes a number, so does Glasgow. Cambridge has its quota, while Oxford is nowhere. Durham has taken up the Newcastle school of medicine, and sends out a few graduates yearly. Long may it survive, is the wish of all, for Edinburgh has always been strong in medicine; and, though the upas-tree shadow of Bennett's do-nothingness has hung over her with a palsying influence for a time, little or no harm has been done permanently. An Edinburgh man is taught to do something more than merely observe a patient and charge him for the observations. He tries to earn his money by doing something for it; and we will hope the interference in a case is never harmful to the patient. The tercentenary has come and gone, and it has been a success.

J. MILNER FOTHERGILL.

CHICAGO.

DELEGATES to the National Convention have returned, and all have expressed the greatest satisfaction with the trip and stay in the capital. The mild air and sunny skies of the Potomac quite captivated the visitors, and the wish has generally been expressed that Washington may be designated as a permanent place for meeting.

Our representatives went expecting to hear more of Code matters, and came home disappointed. So far as the Code is concerned we stand upon a sort of neutral ground, half indifferent, ready to yield to the stronger side. Had we better local organizations in the way of medical societies, this feeling of indifference would give place to one of lively interest and healthful expression.

Matters with our medical society have been growing less and less satisfactory, till at last there is a fair division of feeling and purpose. The very junior element arrays itself in opposition to the middle-aged and older members. Being sharp in politics, the young men organized themselves just prior to the last annual meeting, held a caucus, canvassed their several districts quietly, and on the night of the election packed the room with the supporters of their ticket. The procedure was so unusual that the opposition were completely overcome by surprise. There was a good deal of indignation expressed by the conservative members because the choice of officers for the year was the choice of a few young gentlemen of the south division. Let it be hoped that this experience will arouse the representative men to a better sense of their duty in the Society, and that the next election may be conducted more to the satisfaction of the members and the credit of the organization.

Quite recently our superintendents of institutions for the insane have returned from a meeting of the national Association. It ap-

pears rather extraordinary that the superintendents, to the exclusion of others, take upon themselves the representation of this important branch of medicine, when they are in fact the least representative, excepting a few members that may be counted upon the fingers of one hand. With these few exceptions, the members of this Society represent not medical acumen, but political influence, and the more influence the less acumen; and yet they would represent psychological medicine in this country, and would have other nations gauge us by their standard. The assistants upon the medical staffs of asylums should have some representation. They are the real workers in this field, and yet they are insulted every year by being ignored and refused membership in the very Society where they should be respected.

The position of assistant physician is not quite as bad as that of ship's surgeon, but it is one needing reform, that this deserving class of medical men may have some recognition.

A few leading men in the specialty of mental and nervous diseases are trying to organize a Western Neurological Society.

Chicago Medical College has again made several changes in its staff of professors.

M.

CHICAGO, May 17, 1884.

PROCEEDINGS OF SOCIETIES.

THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.

THE Thirty-Fifth Annual Session of this Society was held in the annex to the Union League, Philadelphia, May 14, 15, and 16, 1884.

First Day, Wednesday.—The meeting was called to order at 10 A.M., by the President, Henry H. Smith, of Philadelphia. Prayer was offered by the Rev. John S. MacIntosh, D.D.

Dr. John B. Roberts, in an appropriate address, briefly welcomed the delegates on behalf of the Philadelphia County Medical Society.

The Hon. Robert E. Pattison, Governor of Pennsylvania, was then introduced, and addressed the Society. He referred to the great distinction which the State of Pennsylvania derived from the character and reputation of the members of the medical profession, and, continuing, said, "Any allusion to the greatness of the medical profession in this State at this time awakens the saddest feeling of deprivation, by recalling the recent irreparable loss of that great man to whom more than to any other is owing our fame in medical science, and whom you all regarded with so much pride and veneration, to whose masterly mind two continents paid tribute, and who held the

triple honors of Oxford, Cambridge, and Edinburgh."

The reports of the delegates to the various Societies were next received.

The Committee on Publication made its report, and offered a resolution as follows:

"*Resolved*, That in the future no paper read before the Medical Society of the State of Pennsylvania shall be printed in the Transactions if it has previously been published elsewhere, unless such previous publication be simply in abstract."

Dr. O. H. Allis offered an amendment, providing that no abstract of a paper read before this Society be published without the approval of the Publication Committee.

After considerable discussion, the whole matter was referred to a committee of five, to report on Thursday morning.

Reports from the medical examiners of nine counties were received, stating that the number of students examined was seventeen, and that of this number fifteen were found to be qualified.

The Committee on the Appeal of the American Anti-Vivisection Society made an extended report, and recommended the adoption of the following:

"*Resolved*, That, in view of the attempts which have been made or are to be made to obstruct by restrictive legislation the progress of experimental medicine, this Society desires to express its earnest conviction that experimentation on animals is a most useful source of knowledge in medical sciences, that it is the means by which many important discoveries, both practical and scientific, have been accomplished, that its direction and supervision can be properly intrusted only to members of the medical profession, and that its restriction or prohibition by law would inevitably retard the acquisition of knowledge in respect to healthy and morbid actions, the cause and prevention of disease, and the improvement of medical art."

The resolution was adopted.

The following amendment, offered on behalf of the Philadelphia County Medical Society by Dr. H. Leffmann, that "No paper shall be read before this Society unless the same has been previously read, either in full or in abstract, before a County society, and by it referred to this Society," was indefinitely postponed.

Dr. E. A. Wood, of Allegheny, moved that a committee of seven be appointed to prepare and report at this session a plan for organizing a society to secure a State Board of Health.

Adopted.

The President appointed on this committee Drs. E. A. Wood, A. M. Pollock, Benjamin Lee, H. C. Wood, H. Corson, W. Varian, and H. L. Orth.

Dr. J. V. Shoemaker, of Philadelphia, offered a resolution endorsing an act to regu-

late the practice of pharmacy and sale of poisons, and to prevent the adulteration of drugs and medical preparations, and recommending Legislature to pass this act at its next session.

Adopted.

Dr. Birdswell, of Susquehanna, offered a resolution that the President appoint a committee to prepare a resolution expressing the sentiments of the Society in regard to the use of intoxicating liquors as a beverage, and to report as early as possible.

The motion to adopt this resolution was lost.

Afternoon Session.—A resolution was adopted thanking Governor Pattison for his address and requesting a copy of it for publication.

In a paper on a "Pennsylvania State Board of Health," Dr. E. A. Wood, of Allegheny County, showed the advisability of having such an organization in this State, and at as early a date as possible.

The paper was referred to the Committee on Publication.

The address in Hygiene and State Medicine was read by Dr. Benjamin Lee, the doctor taking for his subject "The Present Outcome of Sanitary Agitation in Large Cities of the United States."

The author stated that in no department of governmental supervision does the United States make so poor a showing, as compared with European countries, as in the care of the public health. In small communities much may be done to overcome this evil by private effort. In order to interpret the teachings of hygienists to the masses and impress upon them their importance, voluntary sanitary associations are required. The first of these was started in Newport, Rhode Island. Now there are one hundred and seventy-five of these associations in operation throughout this country.

They are designed to assist the public health authorities where such exist, and to take their place where health boards have not been established. In large cities the attempt has been made to overcome the evil by the formation of stock companies, who are to examine dwellings and correct sanitary defects. This should be the duty of the State and municipal governments, but when they fail to do their duty it becomes the duty of private citizens to attend to these matters.

Referred to the Committee on Publication.

The next paper was by Dr. Henry Leffmann, and was entitled "Proper Medical Education."

In this paper he objected to the ordinary division of medical studies into seven branches. Hygiene, the study of diseases of the mind, and medical jurisprudence have so developed that they might with propriety be taught by separate chairs. He thought that there could be no objection, in view of the success at-

tained by dentistry, to the establishment of degrees of doctor of otology, ophthalmology, and so on. He also thought and expressed the opinion that the licensing board should be separated from the teaching body.

Referred to the Publication Committee.

Dr. T. H. Fenton read a paper on "Hygiene in the Public Schools." After alluding to some established principles of hygiene, Dr. Fenton criticised the appointments of schools for children in this city. The location of many school-buildings is faulty. They are not so situated as to receive a proper amount of air and light. The ventilation is frequently defective. The desks are often so situated that the light falls directly on the scholar's face. The amount of recreation was not sufficient, while the hours of study were too long. After pointing out these various defects, methods of removing them were indicated.

Referred to the Publication Committee.

The address in Medicine was delivered by Dr. Alice Bennett, of the State Hospital for the Insane at Norristown, on "The Relation of Heart-Disease to Insanity." Some reference to current literature was made, in order to show how little attention has been paid to the influence of cardiac disease in producing changes in the brain, and a review of what had been written on the subject was given. The paper referred particularly to the occurrence of cardiac disease in connection with chronic mania. In such cases the first symptoms are hallucinations of one or more senses, usually of hearing, and subsequently accompanied with delusions of persecution. Some of these cases may become dangerous, while many of them are simply turbulent and noisy.

A series of sixteen cases illustrating these points was given, and most frequent forms of cardiac disease were referred to.

Referred to the Committee on Publication.

The Society was, during the afternoon, visited by the Association of Superintendents of Insane Asylums, who entered the room during the reading of the above paper.

The last paper of Wednesday's session was read by Dr. R. H. Chase, also of the Norristown Hospital, whose topic was "The Protective Rights of the Insane of Pennsylvania." The history of the various movements for the protection of the insane from the time of the establishment of the first insane asylum up to the present time was given. The legislation which had recently been enacted was fully described, and the statement was made that in the State of Pennsylvania the protective rights of the insane were equal to those of any part of the world, and, on account of the many precautions which had been provided, he believed that unjust retention in an insane asylum was entirely impossible. The law calling for the removal of all insane from the almshouses should be en-

forced, and he thought that separate provision should be made for the criminal insane.

Referred to the Publication Committee.

Dr. John B. Roberts, of Philadelphia, made some remarks in regard to the insufficient requirements of the medical schools, and, to overcome the difficulties, offered a resolution providing for the appointment by the Nominating Committee of a committee of seven, who should procure from the Legislature a charter for a medical college to be established in Philadelphia or Allegheny County, the committee to be known as the "Committee on Medical College." This college was to insist on a preliminary examination, a three years' graded course, and an examining board appointed by the Society. If the colleges now in existence adopted within one year the course laid down in these resolutions, the committee were to do nothing in the matter.

The point of order was raised that this was practically an amendment to the constitution, as it provided for a new committee to be nominated by the Nominating Committee, and therefore must lie over for one year.

This led to considerable discussion, during which the hour of adjournment arrived, and the whole matter was laid on the table.

Adjourned.

Thursday Morning Session.—The meeting was called to order at ten o'clock.

The first business was the naming of a member from each county to serve on the Nominating Committee.

Dr. Benjamin Lee, the Treasurer, made a report, showing a balance of \$2451.85 in the treasury.

The address in Medicine was delivered by Dr. W. H. Daly, of Allegheny. The doctor, after referring to the experiments of Koch and Pasteur, concluded that the results which they had attained were far less valuable for therapeutic deduction than the results of careful clinical observation, and that, of the two methods, this was the one which physicians should adopt. The discovery by Jenner of vaccination was pointed out as one of the results of clinical observation. The writer did not underrate the value of scientific research, for this served to qualify the student better for accurate clinical observation. In order to carry on such experiments as those of Koch and Pasteur, facilities are required which few physicians could command.

In reference to specialists, the doctor thought that it was through them that many of the advances in science had been made. Among others, he referred to the discovery of the errors of refraction and accommodation by Donders, and to the introduction of the operation of iridectomy for the relief of glaucoma. He then referred to the great advances which had been made in laryngology. He referred to several cases in which the specialists had corrected a faulty diagnosis

made by the general practitioner. He accepted Dr. Hodgen's statement that a specialist should be a physician and something more; too often he is something less. In many cases it is not that the physician seeks the specialty, but that the specialty seeks him by natural selection.

Dr. E. A. Wood objected to the remarks of the previous speaker in reference to scientific experiments. He considered them very important, and thought that the profession should be encouraged to persevere in them.

Referred to the Committee on Publication.

The next paper was on "Disorders mistaken for Hydrophobia," by Dr. Charles W. Dulles.

He considered hydrophobia to be a rare disease, and that in many cases in which this affection was supposed to exist some error of diagnosis was made. One symptom on which much reliance was put as a diagnostic sign was the dread of water, which was frequently absent in cases of the true rabies. He then pointed out some of the many affections which might be confounded with hydrophobia. Among these are certain diseases of the nervous system, as acute mania and delirium and tetanus. Mania-a-potu would sometimes account for the symptoms. Hysteria sometimes simulates this disease. The symptoms produced by the remedies commonly employed in the treatment of hydrophobia are often very similar to those of the disease itself. The doctor thought that the condition of the mind had much to do with the appearance of the symptoms and also the fatal issue.

Dr. Traill Green, of Easton, agreed with the speaker that many cases of so-called hydrophobia were instances of mistaken diagnosis. He had never seen a case of hydrophobia in a man, but he had seen one rabid dog. He asked how many of the persons present had seen a case of hydrophobia. (A half-dozen members said that they had seen such cases.)

The doctor pointed out the foolishness of having dogs muzzled during the summer months, for it has been found that dogs go mad at other seasons of the year as well as during dog-days. The speaker thought that there was a far more serious form of hydrophobia about, to which little attention was paid.

Referred to the Publication Committee.

"The Principles of External Treatment in Diseases of the Skin" was the title of a paper read by Dr. Arthur Van Harlingen.

A few years ago, but four external remedies were principally employed in the treatment of skin disease. These were arsenic, oxide of zinc, mercury, and sulphur. The first two were used in what was called eczema, which was a general name under which many different affections were grouped, the third in syphilitic disease, and the last in the itch.

Some of these errors had been removed by the teachings of Dr. Duhring, but the subject was still a difficult one. He thought that it would be a good plan to class the more common external remedies according to their effects. By so doing, certain principles of treatment might be educed which would enable the physician to treat many forms of diseases of the skin from their appearances, without requiring a complete knowledge of the nomenclature and classification of dermatology. The writer went on to give a classification of the various remedies according to the effect on the skin.

The object of the paper was to suggest certain lines of treatment which might be of service to the general practitioner.

Referred to the Publication Committee.

"Jequirity" was the title of a paper by J. V. Shoemaker, M.D.

The activity of this agent was attributed to the fact that it forms a rich culture-field for bacteria, for when these are destroyed by boiling or antiseptics, the infusion was found to be inert. The use of this drug in certain forms of diseases of the eye had suggested its use in certain morbid cell-growths of the skin. As tests, lupoid conditions, epithelioma, and sloughing ulcers had been selected. It was soon found that the infusion used in ophthalmic practice was not strong enough, and a stronger preparation was obtained.

When first applied, this causes no pain, but produces a very severe inflammation. Thick crusts are formed, under which the process of repair takes place. Under repeated applications of this remedy cures are effected. The remedy is to be used with caution. (Cases of lupus were shown completely cicatrized.)

Referred to the Committee on Publication.

Dr. J. H. Musser read a paper on "A Modification of the Sphygmograph," in which, after recounting the disadvantages of the ordinary Pond instrument, he described a modification which Dr. Mateer devised, by which time would be saved and the instrument brought into more general use. The base of the old instrument was too large. This had been so modified that it closely fitted the vessel at its most prominent part. The instrument was exhibited, and drawings shown indicating the alteration.

Referred to the Publication Committee.

A paper on "Bronchitis and Pneumonia of Rheumatic Origin" was next read by Joseph B. Potsdamer, M.D.

Rheumatic bronchitis has its seat in the fibrous tissue of the bronchi, while rheumatic pneumonia is always secondary to rheumatic bronchitis. The doctor next referred to the symptoms of these affections. The diagnosis is to be made, as a rule, by exclusion.

If, in rheumatic pneumonia, the disease be recognized at an early stage, the prognosis is favorable.

The treatment is the same as for other

rheumatic conditions. Illustrative cases were cited.

Referred to the Publication Committee.

Dr. Traill Green read a paper entitled "A Plea for Chemistry."

The doctor referred to the indifference of students to this branch of medical education. He next referred to some of the results which had followed improper combinations. Glycerin should never be added to easily-oxidized agents, as the permanganates, chlorates, and chromic acid. A case was reported in which a solution of chlorate of sodium used for rhus-poisoning had been allowed to accumulate on the hands, and it had taken fire from bringing it too near a flame. Many other instances were given illustrating the ignorance of many members of the profession on these matters.

Referred to the Publication Committee.

Adjourned.

Thursday Afternoon Session.—On motion, Friday morning was allotted to Dr. Joseph Leidy to present a resolution in reference to the Anatomical Bill of Pennsylvania.

The Nominating Committee reported the following officers for the ensuing year:

President.—E. P. Allen, M.D., Bradford.

Vice-Presidents.—Drs. Jacob Price, Chester; D. M. Bland, Columbia; C. Brandes, Erie; and S. R. Rutledge, Blairsville.

Permanent Secretary.—Dr. William B. Atkinson, Philadelphia.

Recording Secretary.—Dr. A. T. Cornell, Lackawanna.

Corresponding Secretary.—Dr. John G. Lee, Philadelphia.

Treasurer.—Dr. Benjamin Lee, Philadelphia.

Committee on Publication.—Drs. John B. Roberts, Philadelphia; Henry Leffmann, Philadelphia; and E. Jackson, Delaware.

The next meeting to be held on the second Wednesday of May,* 1885, at Scranton, Lackawanna County.

Chairman of the Committee of Arrangements.—Dr. J. F. Everhart.

The associates to be selected by the Lackawanna County Medical Society.

Dr. John B. Roberts declining, Dr. R. J. Dungleison was named to fill the vacancy in the Committee of Publication.

The report of the Nominating Committee was accepted and the officers declared elected.

The address in Obstetrics was delivered by Dr. Jacob Price, of West Chester.

The reader spoke in detail of the treatment of the vomiting of pregnancy. He recommended rest, the use of salines when required, and local applications of iodine and carbolic acid.

In regard to abortions, one of the important causes was flexion. The tampon should

be used. The immediate removal of the placenta and membranes by instruments was condemned.

In puerperal convulsion the remedies recommended were venesection, which was considered the most important, bromides, chloral, morphia, and, where the kidneys are inactive, pilocarpin.

In puerperal fever, cleanliness, antiseptics, and vaginal irrigation were recommended.

Referred to the Committee on Publication.

Dr. Benjamin Lee, of Philadelphia, read a paper on "Massage, the Latest Handmaid of Medicine."

Four methods were described,—viz., stroking, kneading, friction, and percussion. Vibration as a modification of kneading was also referred to. One of the great advantages of massage in the treatment of disease is that it leaves no unpleasant after-results. In summing up, the doctor said, "Whenever we want to profoundly modify the process of nutrition, to remove effete material from the system, to stimulate assimilation and invigorate digestion, to soothe nervous irritability and relieve nerve-pain, to remove morbid deposits from around inflamed joints, to equalize the circulation, sending the blood from the hot head, the congested spine, or the laboring heart to the cold extremities, we shall, if we are wise, use massage."

Referred to the Committee on Publication.

A paper on "Diphtheria" was then read by L. B. Kline, M.D.

The disease was defined to be "an acute, specific, contagious, and infectious disease, of a miasmatic character." Examples showing its infectiousness were given. The indications for treatment are to destroy the local lesions, so as to prevent further absorption, to neutralize as much as possible the absorbed virus, and to support the system. As a local application, tincture of the chloride of iron and glycerin is relied on. Carbolic acid and glycerin may also be used.

As a gargle, the following is recommended:

R Acidi lactici, gtt. xx to xxx;
Spr. rectificati, ʒijss;
Glycerinæ, ʒss.

Sig.—Add a tablespoonful to a glass of water, and gargle frequently.

Internally, quinine, iron, and chlorate of potash are necessary. Nourishment must be insisted upon. When the disease involves the trachea, the spray is to be used.

Referred to the Publication Committee.

Dr. H. C. Wood was called upon to give his views in reference to diphtheria.

Dr. Wood gave a review of the experiments which he, with Dr. Formad, had been conducting for the last three or four years. They had in numerous instances produced the disease in animals by the use of matters from diphtheria in man, and the doctor thought that he had seen at least two instances in which children had taken the disease from

* On Friday, the time for the next meeting was changed to the last Wednesday of May, instead of the second.

cats. They had come to the conclusion that diphtheria is produced by a micrococcus which is in every man's mouth. Diphtheria, in the great majority of cases, is primarily a local disease. The injection of the poison into the blood produced no effect unless there was a local lodgment of the poison. It had also been found that as long as the micrococci did not invade the white blood-corpuscles the prognosis was favorable, but as soon as they were found within the blood-globules the fate of the individual was sealed. The same was true in cases of scarlet fever and measles.

Diphtheria had been produced by material from puerperal metritis, sloughing sores, and gangrenous ulcers, and the conclusion had been reached that diphtheria is in reality not a distinct disease, but nothing more or less than a putrid sore throat.

Dr. Wood was requested to furnish a copy of his remarks for publication.

"The Work of Women Physicians in Asia" was reported by Mary H. Stinson, M.D.

In this article a history of the work of women physicians in Asia and Africa, and the possibilities which were afforded by their employment as medical missionaries, were discussed.

Dr. J. A. McFerran exhibited an obstetrical forceps jointed at the junction of the blade and the shanks.

In certain cases, delivery cannot be effected with any of the ordinary forceps, but the forceps exhibited leaves the head free to deflect, flex, or extend. The action of the forceps was illustrated on a model.

Referred to the Publication Committee.

Dr. Benjamin Lee, of Philadelphia, showed two splints for the treatment of disease of the hip-joint. One was the ordinary splint, which kept the joint rigidly fixed, while the other was one which allowed motion of the joint and at the same time produced extension. The latter was considered by far the better, its principal advantage being that extension was made while motion of the joint was permitted. He presented a case which he had treated in this way sixteen years ago. When first seen, the disease was in the third stage. He presented him cured, and requested that a committee be appointed to examine the man and report. Drs. O. H. Allis, De Forrest Willard, and Pollock were appointed by the President to examine the patient.

The following resolution was offered by Dr. Jackson:

"Resolved, That a committee of seven be appointed by the chair to inquire as to the best method of making the diploma which permits a man to enter upon the practice of medicine in the State of Pennsylvania a real guarantee of his qualification for the work, the committee to report at the next annual session of the Society."

Dr. Gates offered the following substitute:

"Resolved, That a committee be appointed

to urge upon the Legislature the passage of an act creating a State Board of Examiners to license persons to the practice of medicine."

Following this were a series of provisions, stating how the board should be constituted, and fixing its duties.

This was decided to be out of order, as covering a different ground from that of the original resolution.

Dr. Jackson's resolution was so amended that the committee should report on Thursday morning of the next session, and that this time be set apart for the discussion of the subject.

The resolution, as amended, was adopted.

Adjourned.

At 8 o'clock in the evening, Dr. Henry H. Smith delivered the President's Annual Address.

His theme was "The Importance and Usefulness of Scientific Medical Organizations to our Profession and the Public."

After defining a society, the history of the formation of the first organizations of individuals was given. Soon after the formation of these societies, it became necessary to adopt rules for the government of the members, and, in order to make these rules operative, it was found necessary to add a penal clause. A code of ethics, therefore, is almost as old as societies themselves. The Pennsylvania State Society was formed in 1848, the first meeting being held in Lancaster.

In reference to the controversy in regard to consultations with those who profess to practise exclusive systems, there can be no question as to what is the proper course. The Code of Ethics has settled that. Any change in it must come from the American Medical Association.

It was suggested that, in connection with State Medicine, the present method of carrying out the sentence of capital punishment was barbarous, and did not correspond with the scientific progress of the age. Electricity would no doubt be more efficient, and reference was made to a chair devised for this purpose.

In concluding, the hope was expressed that the present session of the Society would promote not only the hygienic interests of the Keystone State, but also those of other communities.

Friday Morning Session.—At the opening of the session, Dr. Levis, of Philadelphia, presented a resolution of regret at the absence from the Society of one of its most honored and venerable members, Dr. John L. Atlee, of Lancaster.

Adopted.

Dr. Joseph Leidy, as chairman of the Anatomical Board of Pennsylvania, presented the following:

"Resolved, That the Medical Society of the State of Pennsylvania, recognizing the im-

portance of anatomy, and duly appreciating the recent acts of Assembly providing for the efficient distribution of dead human bodies, recommend the members of the medical profession throughout the State to encourage the Anatomical Board in carrying out the provisions of the act."

Drs. J. Ewing Mears and Traill Green spoke in favor of the resolution.

The resolution was adopted, and the Permanent Secretary instructed to send a copy to the secretary of each county medical society, with the request that it be read to the society as early as possible.

The address in Ophthalmology was delivered by William S. Little, M.D., on "The Value of Pupillary Symptoms in General Disease: An Analysis of One Thousand Cases." After a general consideration of the value of alterations in the size of the pupil, which are more commonly found in diseases of the cerebro-spinal system than in other affections, the speaker went on to give a summary of the cases which he had examined.

Referred to the Committee on Publication.

Dr. Edward Jackson, of Chester County, read a paper entitled "Alarming and Dangerous Doses of the Mydriatics." The popular idea in regard to the poisonous properties of the various mydriatics has but little foundation in fact. A large number of cases of poisoning have been recorded, but in very few of these has death resulted. The doctor summed up with the following conclusions:

For adults the minimum fatal dose of atropia is not less than the minimum fatal dose of morphia.

For children two years old the minimum fatal dose of atropia is not less than that for adults, and it is very probable that the same is true of datura and hyoscyamia.

Proper care should, however, be taken to avoid unpleasant symptoms. These symptoms are not to be considered more dangerous than the symptoms of intoxication from alcohol or ether.

Referred to the Publication Committee.

Dr. Albert G. Heyl read a paper on "A Form of Epithelial Mycosis." This is a parasitic disease of the cornea, which is accompanied by severe and often fatal symptoms. The parasite induces fatty degeneration of the epithelial cells. The disease generally begins with hemeralopia. In a month or two this may be followed by ulceration of the cornea. General symptoms then appear. There is fever, a peculiar apathy, purging and vomiting follow, and the patient often succumbs to broncho-pneumonia.

It was thought probable that the symptoms were traceable to the epithelial mycosis, and it was suggested that the epithelial cells were the receptive organs of centripetal nerves.

Dr. Carl Seiler exhibited a new form of electric laryngoscope which he had invented. A small incandescent lamp is mounted on an

arm about four inches long, which is attached to the ordinary head-mirror. A double-convex lens is inserted between the mirror and the lamp. The advantages of this arrangement are that it gives off very little heat, the light is whiter, and, if the electricity gives out, the mirror can be used as an ordinary head-mirror.

"Does a Chronic Discharge from the Ear make Life-Insurance Hazardous?" was the subject discussed in a paper read by Dr. C. S. Turnbull, of Philadelphia. He maintained that the existence of a chronic ear-disease rendered the risk extra-hazardous. He suggested an ocular examination of the ear in all cases, and, where the interests involved were large, the ears should be examined by an expert. He recommended that physicians, in examining for life-insurance, should test each ear separately with the watch, the eyes being covered, that the auricular region should be carefully inspected, and the part should be examined nasally for any odor.

The next paper, by Dr. P. D. Keyser, was entitled "Some Ophthalmological Observations." In pterygium the operation of the ligature was considered the best. Glioma was next considered, the proper treatment being early enucleation. If the nerve or brain be involved, this operation should not be performed.

Referred to the Publication Committee.

The address in Surgery, on "Surgical Delusions," was delivered by Dr. J. B. Roberts.

The belief in the safety of chloroform was the first delusion referred to. The second was in reference to the value of styptics: these often do harm, and are never necessary. The next delusion was the fatality of small hemorrhages. A person can lose a much larger quantity of blood without danger than is generally supposed. In regard to trephining the skull, it was thought better to err on the side of action than on that of inaction. The fear of the operation of trephining often leads the surgeon to leave unsuspected serious fractures of the skull. The doctor then referred to delay in operating on strangulated hernia, to delay in opening acute abscesses, and to delay in the removal of malignant tumors.

Among other delusions referred to were the necessary fatality of traumatic tetanus, the fatality of wounds of the heart and pericardium, the symmetry of normal limbs, and the uselessness of treating vicious union of fractures.

"The Operative Treatment of Purulent Pleural Effusions" was the title of a paper contributed by Drs. E. T. Bruen and J. William White.

After referring to a number of cases, with their symptoms and treatment, the writers offered the following conclusions:

The formation of purulent effusions is dependent on lowered vitality, the scrofulous diathesis, or intercurrent disease.

The diagnosis can be made only by puncture.

In children, one or two aspirations will often effect a cure: if they do not, incision of the chest, without the use of a drainage-tube, is usually all that is necessary.

In older children, and in adults, it is proper to aspirate at once: if recovery do not result promptly, a large drainage-tube should be inserted at the most dependent point.

If drainage be defective, a second opening should be made, and a tube carried directly across the base of the chest.

If after from two to four months there should be no disposition to permanent closure, and if there are indications that the lung is capable of expansion, it is proper to remove a certain portion of the ribs of the affected side.

If drainage be thorough, injections are not required.

Where the lung is bound to the diaphragm, and there is no possibility of expansion, or where it is the seat of tuberculous or inflammatory infiltration, the operation is contra-indicated.

Dr. C. B. Nancrede, of Philadelphia, read a paper on "The Bichloride of Mercury in Surgical Practice."

The teachings of Lister and the introduction of greater cleanliness and the use of antiseptics have had a marked effect in diminishing the mortality after surgical injuries. Statistics were given showing the mortality under different plans of treatment, and proving the great value of antiseptic methods.

Corrosive sublimate has been shown to be the best germicide. One part in four thousand is efficient, while one part in one thousand is as strong as is ever required. The method of employing this dressing is as follows: The part is cleansed and washed with a solution of turpentine in alcohol (1 to 7). The sponges used are kept in the corrosive chloride solution (1 to 2000). The instruments are kept in a carbolic acid solution, because the mercury acts on the steel. The operation having been completed, one or two drainage-tubes are introduced: the wound, having been syringed with the antiseptic solution, is dressed with compresses of gauze which have been immersed in the same solution. These are held in position with bandages which have been treated in the same way.

No bad effects follow the use of this agent. Occasionally a slight erythema, and at times, when the application has been continued for a long time in susceptible individuals, slight constitutional symptoms, may appear, but these are relieved by omitting the dressing for a few days. The doctor then cited cases from his personal experience, showing the advantages of this method.

Referred to the Committee on Publication.

The Judicial Council made a report in the case of the appeal of Dr. Cotton, of the Tenth

District, and recommended that the case be recommitted, on account of certain technical reasons, to the censors of the Tenth District, with instructions to return the case to the Crawford County Society for early action.

Adopted.

The President announced that the committee of inquiry under the resolution of Dr. Jackson would consist of Drs. E. Jackson, Delaware; Traill Green, Northampton; J. B. Deaver, Philadelphia; Henry Leffmann, Philadelphia; — Gates, Allegheny; and Frank Woodbury, Philadelphia.

The committee to which the report of the Publication Committee and the accompanying resolutions had been referred reported the following:

"Resolved, 1, That all the papers read or appointed to be read before this Society become thereby the exclusive property of the Society, and the author has no right to publish or cause to be published the paper or any part of the same without the consent of the Society. The Committee on Publication shall not be at liberty to publish any paper that has been published in violation of the above requirements.

"Resolved, 2, That the Medical Society of the State of Pennsylvania looks with great disfavor upon the making use of this organization as an advertising medium, and holds such practice as contemptible, as a flagrant violation of the spirit of the code of medical ethics."

This provoked considerable discussion, and, the hour of adjournment arriving, the matter was laid on the table.

Adjourned.

Friday Afternoon Session.—The first paper was read by Dr. De Forrest Willard, on "The Non-Necessity of Tarsotomy in Talipes in Children."

After reporting a number of illustrative cases, the following conclusions were given:

In children under ten years, even in extreme cases, subcutaneous division of all the contracted tissues with powerful manual force will restore the foot to its proper position.

Fixation needs to be continued but a short time, when stretching, and an apparatus to encourage muscular action, should be employed.

Tarsotomy should be limited to cases in which moderate measures have failed, and to adults with deformed tarsal bones.

"Chronic Articular Osteitis of the Knee-Joint" was presented in a paper by Dr. A. Sydney Roberts.

After a review of the pathology and symptoms of this affection, he described a splint which he had devised for its treatment, and presented a case illustrating its method of employment.

Referred to the Publication Committee.

Dr. W. S. Janney exhibited a case of unusual displacement of the trachea by a tumor,

with the tracheotomy-tube inserted two inches to the left of the median line of the neck. The man was admitted to the Philadelphia Hospital. The operation of tracheotomy was attempted in the usual manner, but the trachea was not in its normal position, being pushed to the left by a mass of enlarged lymphatic glands. After considerable difficulty, a tube was inserted in the trachea: there was an immediate relief to the dyspnoea. At a later period the lymphatic glands suppurated, and a number of them were removed.

The case was presented to the Society.

Referred to the Publication Committee.

The resolution in regard to the publication of papers read before the Society was taken from the table.

Dr. George Strawbridge, of Philadelphia, moved to amend, that the chairman of the Publication Committee be authorized to publish abstracts of the papers read at the meetings of the State Medical Society, the same not to interfere with the regular authorized yearly report.

An amendment to the amendment, that the members should furnish abstracts to the chairman of the Publication Committee, was lost.

Dr. Strawbridge's amendment was adopted, and the resolution as amended was adopted.

The second resolution was also adopted.

One hundred dollars was appropriated to the Committee on Medical Statistics, to be spent in the collection of statistics.

A report, signed by Drs. E. A. Wood and A. M. Pollock, was received from the committee in regard to forming a plan for the organization of a State Board of Health, recommending that the President appoint one or more members from each county to serve as the new society. Other provisions followed, indicating the duties of these members.

The report was accepted.

Dr. Pollock moved that when the Society adjourn it adjourn to meet on the last Wednesday of May. It was stated that this would suit the Scranton delegation better, and would also give the members attending the meeting of the American Medical Association more time to return.

Adopted.

On motion of Dr. Benjamin Lee, the Committee on Vivisection was given the privilege of publishing its report in full in advance of its publication in the Transactions.

Dr. De Forrest Willard reported that he had examined the case of hip-joint disease presented by Dr. Lee, and had found the two limbs of the same length, good extension, but flexion beyond a right angle and rotation impaired. There was no induration about the joint, and the man walked with facility.

A telegram was received from Dr. John L. Atlee, thanking the Society for its kind message and regretting his inability to be present.

The Permanent Secretary was authorized to employ such clerical aid as he might require in making abstracts of the papers.

Bills to the amount of \$285.69 were ordered paid.

The following were appointed to prepare the regular addresses for the next session: Surgery, E. A. Wood, Allegheny; Obstetrics, C. A. Rahter, Dauphin; Hygiene, J. J. Richardson, Philadelphia; Mental Diseases, S. S. Schultz, Montour; Medicine, E. T. Bruen, Philadelphia; and Otolaryngology, C. S. Turnbull, Philadelphia.

Dr. Turnbull offered resolutions endorsing the action taken by the Alumni Association of Jefferson Medical College in reference to the erection of a monument in Fairmount Park to commemorate the greatness of Prof. S. D. Gross, and providing for the appointment of a committee of five to act with the Alumni Association.

Adopted.

On motion of Dr. H. Leffmann, it was decided to set apart one page of the coming volume of the Transactions, on which should be printed the above resolutions, and that this page should be known as the Gross Memorial Page.

The retiring President then introduced the President-elect in a few graceful remarks.

Dr. E. A. Allen, in assuming the chair, thanked the members for the honor which had been conferred upon him, and which he felt the more from having been elected to the office in Philadelphia, the cradle and nursery of medical science.

The question of binding the next volume of the Transactions of the Society was left to the discretion of the Publication Committee.

After passing votes of thanks to the retiring officers, the County Medical Society, etc., the Society adjourned.

W. H. M.

AMERICAN LARYNGOLOGICAL ASSOCIATION.

THE Sixth Annual Congress of the American Laryngological Association, which was held on May 12, 13, and 14, in New York, like many of the former meetings, was full of interest, on account of the large number of scientific and interesting papers which were read and discussed. Representing, as they do, the progress in the department of laryngology and rhinology in America for the past year, it will no doubt be interesting for the readers of the *Medical Times* to peruse a condensed report of the proceedings, rather than a review of the literature recently published in these specialties.

The President, Dr. FRANCKE H. BOSWORTH, of New York, opened the meeting by an address of welcome, and then read a paper on "The Clinical Significance of Fibrinous Exudations upon the Mucous Membranes of the

Upper Air-Passages," in which he held the view that the affections of the mucous membranes of the upper air-passages characterized by fibrinous exudation were essentially different from simple catarrhal inflammations, and were akin to an essential fever, not differing materially from an exanthem, the local lesion being evidence of a general affection by a micro-organism. He cited follicular tonsillitis and pharyngitis as examples of a mild type, while croupous tonsillitis in children was of a more grave nature, being frequently the forerunner of croupous laryngitis. He regarded diphtheria and croup as distinct diseases, but at the same time both are due to micro-organisms, and closed his paper with the propositions that fibrinous exudation occurring in the crypts of the tonsils and upon the mucous membrane of the lower pharynx has no tendency to extend, and is self-limited; that the fibrinous exudation which occurs upon the surface of the tonsils runs a course and presents an appearance by which it can be recognized; that a croupous inflammation of the mucous membrane of the fauces in adults is a self-limited affection; that when the same disease occurs in children there is direct danger of a new centre of inflammation developing in the larynx; that diphtheritic membrane developed in the fauces marks a disease dangerous to life, with a marked tendency to development of the same process in the larynx.

In the discussion which followed, Dr. BEVERLEY ROBINSON took exception to several of the statements made in the paper, and particularly in regard to the causation of these fibrinous exudations by micro-organisms. He also believed that there are cases which have been termed herpetic tonsillitis, and which should be regarded as such, and not as cases of follicular tonsillitis, as indicated in the paper.

Dr. W. C. JARVIS concurred with Dr. Robinson.

Dr. F. T. KNIGHT, of Boston, called attention to the fact that an increased susceptibility to diphtheritic infection exists in those who have an acute affection of the mucous membrane of the upper air-passages.

Dr. BOSWORTH, in closing the discussion, said that he concurred with Dr. Knight, and that the mucous membrane in a state of acute catarrhal inflammation is a favorable medium for the lodgment of the germs which produce the diphtheritic process, without there being necessarily any connection between the two processes. The paper contained so many points of interest, and the views expressed therein were frequently so widely different from those generally accepted, that the discussion was perhaps less instructive than it might have been had there been but one or two points thrown out for discussion. However, as regards the germ-theory of the production of diphtheria and croup, the views of

most of the members were different from those expressed in the paper, and, although it may be admitted that micro-organisms may play an important part in the transmission of the disease from one person to another, yet they cannot be regarded as the *sole* cause.

Dr. JOHN N. MACKENZIE, of Baltimore, then read a very interesting paper, entitled "A Contribution to the Study of Congenital Syphilis," in which he related the history of a case under his observation. In this case there was considerable ulceration of the pharynx, with resulting stenosis, and paralysis of the upper eyelids, with subsequent paralysis of the abductor muscles, as well as deafness in one ear. He described the case as one of congenital syphilis affecting the cranial nerves. He also stated that during an attack of scarlet fever the pharyngeal ulceration had healed without local treatment. In drawing his deductions from this case, he called attention to the following points: that there was no reason for believing in the existence of an ulcerative scrofulide of the throat; that while congenital syphilis afforded no protection against the occurrence of other diseases, it mitigated the course of certain acute affections accompanied by an exanthem; that the syphilitic ulceration of the throat is frequently cured by the intercurrent disease; and, finally, that these remarks do not apply to malignant epidemic influences or to syphilitic cachexia.

In the discussion which followed, Dr. E. L. SHURLEY, of Detroit, said that he considered scrofula and syphilis as two distinct but closely-related conditions, but he was not prepared to say how much difference there was between scrofulous and tubercular ulcerations.

Dr. MACKENZIE said that before the discussion went any further he would ask permission to state that he did not wish to be understood as saying that there was no difference between scrofula and syphilis, and did not mean to say that all scrofula is syphilis. But he would say that all ulceration of the throat was due to some diathesis, and that there was no distinctive point of difference between scrofulous, syphilitic, tubercular, and lupoid ulceration.

Drs. KNIGHT, DONALDSON, and BOSWORTH all expressed their opinion that there was no difference between the ulcerations of scrofula and those of syphilis, and that the treatment in these cases was that outlined by Dr. Mackenzie,—viz., mercurials, iodide of potassium, and the local use of iodoform.

Dr. HARTMAN, of Baltimore, referred to a case of syphilitic ulceration in a child, which was worse during and after an attack of measles, thus disproving to some extent the assertion of Dr. Mackenzie that these ulcerations are benefited by an intervening attack of an exanthem.

After some business was transacted, among which was the election of Drs. S. SOLIS COHEN

and C. C. RICE as Fellows, the meeting was adjourned till afternoon.

The first paper of the afternoon session was by Dr. J. O. ROE, of Rochester, on "Retro-Pharyngeal Abscess," in which he reviewed the different courses and the anatomical relation of parts, and made the point in recommending to make a small incision in the sac first, and then, after the head of the patient is well thrown forward, to evacuate the pus by enlarging the incision, thus preventing the entrance of pus into the larynx. He also reported three cases treated in this manner.

The discussion was mainly on the diagnosis and manner of opening the abscess.

Dr. T. A. DE BLOIS, of Boston, then read a paper on a case of congenital web of the vocal bands, which he had treated by rupturing the web by introducing a laryngeal forceps, closed, into the cavity of the larynx and then forcibly opening it.

Dr. HARTMAN, in the discussion, said that a procedure like that described in the paper was rather dangerous, and he would prefer to use the galvano-cautery in a case of this kind.

Dr. KNIGHT could not see the danger in a case in which the membrane uniting the vocal bands was so thin as it had been in this case, and thought, on the other hand, that the galvano-cautery knife was to be avoided.

Dr. ASH reported a case in which a web had formed after an attack of acute laryngitis.

In conclusion, Dr. DE BLOIS said that in his case neither the knife nor the galvano-cautery could have been used, on account of the great sensitiveness of the parts. Webs of this kind, although not common, are occasionally met with, and the most common causes are linear ulcers of the edges of the vocal cords and thyrotomy. Wherever practicable, the galvano-cautery is certainly the best means of dividing the adhesion, and is to be preferred to the covered knife, because reunion of the cut surfaces is not liable to take place after the galvano-cautery has been used.

Dr. WILLIAM H. DALY, of Pittsburg, then read a paper in which he reported a case of gunshot wound of the larynx, in which the vocal bands were involved. He first referred to the literature of the subject as found in the "Surgical History of the War," and in the writings of Gross and Cohen. The case was that of H. C. D., 18 years of age, who was accidentally shot with a pistol, thirty-two calibre, the ball entering the right side of the neck, traversing the larynx, and lodging immediately over the left subclavian artery, from whence it was removed. The boy recovered, and regained the power of vocalization sufficient for all purposes except the requirements of an orator or elocutionist. Dr. Daly then read several histories which had been sent to him by medical gentlemen with whom he had corresponded with reference to this class of cases.

Dr. J. SOLIS COHEN, in the discussion on

this paper, said he was astonished to find in the literature so few cases of gunshot wounds of the larynx. He also said that he had seen the boy shortly after he had been shot, and had then been in doubt as to whether the ball had entered the larynx at all: he was, therefore, astonished to hear that the ball had passed through the larynx and that it had not produced more symptoms. He also said that there were only four specimens of gunshot wounds of the larynx in the Army Medical Museum.

Dr. LEFFERTS, of New York, referred to a specimen in his collection in which the ball had entered the larynx without extensive destruction of the thyroid cartilage.

The scarcity of recorded cases in the "Surgical History of the War" may be accounted for by the fact that in warfare the missiles are much larger than the ordinary pistol-ball, and are fired with greater initial velocity, so that a shot in the region of the larynx must almost necessarily be fatal, either by entering the spinal canal, or lacerating the large vessels, or, finally, by wounding the pneumogastric nerves.

Dr. J. SOLIS COHEN then read a report of "A Case of Complete Unilateral Paralysis of all the Adductors of the Vocal Bands, the Abductors remaining Intact," caused by a suicidal incision in the neck. The author said that very little could be learned as to the extent of the external injury, as he had seen the case several months after the wound had healed. The laryngeal mirror showed the vocal cord on the affected side to be in a position of extreme abduction.

During the discussion, which hinged chiefly upon a possible explanation of the phenomenon, Dr. BOSWORTH said this was the first authentic case demonstrating the possibility of the occurrence of true adductor paralysis.

Dr. SEILER referred to the fact that a chiasm exists between the two recurrent laryngeal nerves, as had been demonstrated by experiments made by Dr. W. W. Keen and himself on the body of a criminal executed several years ago at Philadelphia, and suggested that the cause of the complete abduction of the cord was not due so much to paralysis of the muscle as possibly to ankylosis of the arytenoid cartilage in the position of abduction. The meeting then adjourned, to meet the next day.

Second Day, Morning Session.—Dr. F. H. HOOPER, of Boston, opened the session by reading a report of a case of "A Rare Form of Tumor (Cavernous Papilloma) of the Vocal Band," in which the growth, a nodular sessile tumor, was situated on the anterior portion of the left vocal cord. It was removed by avulsion without recurrence, and proved under the microscope to be a cavernous tumor, with largely-developed papillæ, resembling closely a papilloma with central

caverns. The reader of the paper thought it differed in this respect from any tumor on record. Dr. SEILER said he had had a case similar to the one reported, in which the tumor was situated about the middle of the upper surface of the right vocal cord, which was removed with the forceps, and showed under the microscope a cavernous structure.

Dr. MORRIS J. ASCH, of New York, then reported a case of "Ecchondrosis of the Larynx," in which he had removed a large cartilaginous tumor, springing apparently from the right arytenoid cartilage, by means of Stoerk's guillotine, modified for the special requirements of the case. He said that only one other case of this kind had been reported, by Dr. John Musser, of Philadelphia, who showed the post-mortem specimen at a meeting of the Philadelphia Pathological Society.

Dr. W. C. JARVIS, of New York, then read a paper on "A New Method for the Removal of Laryngeal Growths, with an Illustrative Case." This communication was largely a defence of the use of chromic acid in the removal of laryngeal papilloma. The method consisted in applying small quantities (one-sixth of a grain) at short intervals, fused upon the point of a probe. The escharotic dissolves immediately when applied to papillomatous tissues, is safe, painless, efficient, its action is confined to the neoplasm, and does not seem to affect unfavorably the normal mucous membrane. It subserves the double purpose of removing the growth and preventing its recurrence. Dr. Jarvis exhibited an ingenious instrument which he had devised for applying the salt to neoplasms of the larynx, and then gave the history of his illustrative case, in which a large growth was successfully removed in about six weeks.

The discussion on this paper was somewhat lengthy, and its drift was that most laryngologists of the present day had discarded the use of escharotics for the removal of growths from the larynx, employing mostly the forceps, and using either chemical caustics or the galvano-cautery to touch the seat of the growth after its removal, with a view to prevent recurrence. The very speedy removal of the large growth in Dr. Jarvis's case, and the ease with which the chromic acid can be applied with his instrument, will no doubt induce many who have heard the paper to try this means of removing growths from the larynx, if a favorable case presents itself to their notice.

A number of new instruments were then exhibited by several members of the Association, to describe which in detail would use too much space, and, as an account of them, together with cuts, will no doubt be published shortly by the several gentlemen, it will suffice to mention only the names. Thus, Dr. J. H. DOUGLAS, of New York, exhibited a new powder-blower, Dr. JARVIS a new laryngeal snare, Dr. MACKENZIE a new self-

retaining nasal speculum, and Dr. INGALS, of Chicago, a pair of forceps for passing the wire of the snare around naso-pharyngeal tumors. Dr. C. E. SAJOURS, of Philadelphia, showed modifications of Mathieu's Tonsillotomy, of Smith's uvula scissors, and of Steel's nasal punch. Dr. D. B. DELAVAN finally showed a simple method to facilitate alimentation in cases of dysphagia from any cause.

Afternoon Session.—The subject of the new nomenclature was introduced, and referred to Council for report at the next meeting.

Dr. D. B. DELAVAN, of New York, then read a report of a case of "Permanent Unilateral Paralysis of Laryngeal Abductors following Cerebral Hemorrhage," in which the cerebral hemorrhage was followed by paralysis of the larynx and pharynx, and which symptoms disappeared, leaving only a paralysis of the abductor muscles of the larynx on the right side, which had thus far lasted for seven years.

During the discussion, Dr. KNIGHT mentioned a case of injury to the head, with alteration of the voice, in which laryngoscopic examination showed paralysis of some of the abductor muscles.

Dr. R. P. LINCOLN then read a paper on a case of "Stricture of the Œsophagus," due to cancer involving the laryngeal and Œsophageal branches of the pneumogastric nerves, and death by later involvement of the cardiac branches.

The discussion was chiefly a report of similar cases under the observation of the members present.

Dr. E. F. INGALS, of Chicago, then read a paper on "Tracheal Stenosis," in which he reported three cases, all of syphilitic character, and in which relief was afforded by large doses of iodide of potassium. One of the cases required two drachms four times a day before any effect was observed.

A number of cases were reported similar in nature and yielding to similar treatment, and Dr. BOSWORTH said he preferred inunctions with mercury to the large doses of iodide of potassium.

The meeting was then adjourned till Wednesday at 10 A.M.

In the evening the annual dinner took place at the University Club.

Third Day.—The session was opened by a paper by Dr. DE BLOIS on "Buccal Tuberculosis," which was a report of two cases of tubercular ulceration of the oral cavity, and the author expressed his opinion that in all cases of tubercular ulceration of the mouth or throat the lungs were involved primarily.

In the discussion, Dr. LANGMAID said that he had seen the second case, and that there was no evidence of tuberculosis in the general appearance of the patient, but, on close examination, the lungs were found to be implicated.

Dr. BOSWORTH said he thought that tuberculosis of the larynx and pharynx might occur primarily, and that in his experience the nearer the tubercular deposit occurs to the outlet the more fatal it is, and the more difficult it becomes to subdue the urgent symptoms of pain and difficulty of deglutition.

A paper on "Herpes Laryngis," by Dr. S. H. CHAPMAN, of New Haven, was then read by title; also a paper by Dr. PORTER, of St. Louis, on "Goitre."

Dr. C. E. SAJOUS, of Philadelphia, then read a paper on "Hay-Fever and its Successful Treatment," in which he advocated the cauterization of the hypersensitive portion of the nasal mucous membrane with the galvano-cautery knife. In conclusion, he said that until after he had completed this paper he had been entirely unacquainted with the labors of Dr. Roe in the same direction, as set forth in the papers which he had read before the Medical Society of the State of New York in 1883 and 1884, in which he claimed that the essential subjective cause of hay-fever was found in the nasal passages, having been induced by disease, either latent or active; that the objective cause of the irritation of this tissue was mainly pollen; that a cure could be effected by the destruction of the nerve-filaments and enlarged vessels of the part; and that the latter could most satisfactorily be accomplished by the galvano-cautery. If he could not be the first, therefore, Dr. Sajous continued, he was glad to be a good second in this matter, and he felt gratified that his conclusions had been confirmed by the more extensive experience of Dr. Roe, who had commenced his present plan of treatment as long ago as 1879, and therefore anticipated him by two years.

In the discussion which followed, Dr. SHURLEY said that he had treated several cases with gratifying results, but he had not singled the whole of the sensitive surface, confining the application of the galvano-cautery to the most sensitive spots.

Dr. ROE said he was glad to hear that his observations had been verified independently by Dr. Sajous, and he was convinced that the treatment with the galvano-cautery was the correct one. He had found, however, that the treatment should not be confined alone to the sensitive portion of the mucous membrane, but that all sources of irritation should be removed, and also that the amount of obstruction of the nasal chambers in patients not suffering from hay-fever was frequently much greater than in those thus afflicted.

Dr. MACKENZIE said that, although he did not feel sure of the pathological condition to which the disease was due, he was sure that there existed an abnormal excitability of the reflex nerve centres.

Dr. BEVERLEY ROBINSON said he had used pure carbolic acid topically in these cases with good results.

Dr. S. JOHNSTON, of Baltimore, who is himself a subject of this affection, said that in his case the attacks always come on regularly on the 28th of August. By remaining in town and avoiding dust, however, he could get along comparatively comfortably while they lasted. He always suffered intensely, however, from railroad-travel during the attack. Last summer he went away in the midst of it, feeling in pretty good condition when he left home, but when he reached Washington he suffered from a terrific paroxysm. From there he went up into the Alleghany Mountains, and as soon as he reached them all trouble instantly vanished. As long as he remained there he was perfectly free from it, but as soon as he reached Washington on his way home he was again attacked. In his own case he had derived most relief from chloroform, eucalyptol, and the insufflation of one-sixth of a grain of morphia in solution. He thought the affection was undoubtedly due to a local exciting element combined with a neurosis.

Dr. BOSWORTH said that in every case of hay-fever there were three essential elements,—a neurotic, a structural, and a sensitive; and if any one of these factors were removed the case would be cured.

Dr. SAJOUS, in closing the discussion, said that he did not mean to ignore the reflex centres, but believed that they were excited by the peculiar sensitiveness of the terminal fibres to the irritation produced by pollen-grains or other dust.

Neither the paper nor the discussion, although interesting, brought out new points either in the pathology or the treatment of the disease, for all the facts elicited have already been published by Roe, Allen, and others, and the substance of the paper was read by Sajous before the Philadelphia Laryngological Society several months ago. There is no doubt that under proper and scientific local treatment most cases of hay-fever can be cured permanently.

Dr. E. L. SHURLEY next read a paper on "The Comparative Value of the Galvano-Cautery in Diseases of the Nasal and Pharyngeal Cavities," in which he called attention—first, to the conditions necessitating the employment of the galvano-cautery; second, the comparative value of this agent; and, third, its intelligent application. Aside from the conditions which by common consent admit of the use of this agent, we should positively discover whether the nasal mucous membrane is temporarily swollen or permanently thickened. In all cases no more of the mucous membrane should be destroyed than is absolutely necessary, for cicatricial tissue does not supply the needs of nature.

Under the second head came mechanical, chemical, and electrical agents. Of the mechanical, Bosworth's modification of Jarvis' snare had served him best for the removal of

polypi, but he had been unsuccessful—probably from lack of skill—in the use of any snare for the removal of hypertrophied mucous membrane. Chemical agents failed to destroy sufficient of tissue, unless applied so frequently that they were followed by damaging reaction. The great merit of the galvano-cautery consisted in the precision with which the offending part could be touched. The mucous and submucous tissue must be completely divided.

The discussion somewhat wandered from the subject, inasmuch as Drs. JARVIS and SAJOURS discussed the use of the wire snare. Both Drs. ROSS and MACKENZIE were very much in favor of the galvano-cautery when used with care and discrimination.

Dr. BEVERLEY ROBINSON, of New York, then read a paper entitled "A Contribution to the Study of Adenoid Vegetations at the Vault of the Pharynx." He considered these growths as of infrequent occurrence. He had yet to encounter the first case in which the growths had impinged upon the orifices of the Eustachian tube and mechanically produced deafness. The writer inclined to the opinion that the ear-disease in these cases was really due to extension of inflammation to the middle ear, and took exception to the view which confounded chronic follicular pharyngitis and adenoid vegetations. In the treatment, scraping, cutting (preferably by Meyer's method), and the galvano-cautery were the means he recommended for their removal.

The discussion, which was rather lengthy, proved that most members were in favor of using the cutting-forceps for removing the adenoid vegetations, except Dr. Jarvis, who said it was dangerous to grope around in the dark behind the palate with a pair of cutting-forceps.

Dr. L. ELSBERG, of New York, read the final paper on the programme, on "Spasm of the Glottis," in which he defined laryngeal spasm to be spasmodic contraction of one or more of the laryngeal muscles, and then considered systematically the subject under the heads of classification, etiology, diagnosis, differential diagnosis, and treatment.

At the business meeting, with closed doors, the following names were presented:

President.—E. L. Shurley, M.D., of Detroit.

First Vice-President.—J. H. Hartman, M.D., of Baltimore.

Second Vice-President.—William H. Daly, M.D., of Pittsburg.

Secretary and Treasurer.—D. Bryson Delavan, M.D., of New York.

Librarian.—Thomas R. French, M.D., of Brooklyn.

Council.—Drs. Francke H. Bosworth, Morris J. Asch, and Beverley Robinson, of New York, and Dr. Frank Donaldson, of Baltimore.

After a ballot had been taken, the above were announced as the officers for the en-

suing year, after which the Association adjourned, the time and place for the next annual Congress to be decided by the Council.

C. S.

THE AMERICAN CLIMATOLOGICAL ASSOCIATION.

THE first annual meeting of the American Climatological Association was held in Washington, D.C., May 3 and 5 instant.

In the absence of Prof. Loomis, the President, Dr. F. I. Knight, of Boston, First Vice-President, occupied the chair.

The first day was occupied in adopting a suitable constitution and by-laws.

The second day was devoted to the reading of papers, as follows: Address by the presiding officer, Dr. Knight; "The Etiology of Pulmonary Phthisis," by Dr. B. F. Westbrook, of Brooklyn; "The Effects of Sea-Air upon Diseases of the Respiratory Organs," by Dr. Boardman Reed, of Atlantic City; "The Relation of Laryngeal Disease to Pulmonary Diseases," by Dr. F. H. Bosworth, of New York; "Dryness," by Dr. Charles Denison, of Denver, Colorado, (in which he dwelt on the following points: "Variability versus equability; a rule for classifying climates as to dryness and desirability, based upon low, absolute, and relative humidities and preponderance of sunshine; the influence of elevation, sunshine, cold, etc., in producing desirable dryness; the physical effect of dryness on man;") "City Life and City Air Injurious to Consumptives," by Dr. Donaldson, of Baltimore; "The Use of Compressed and Rarefied Air as a Substitute for Change of Climate in the Treatment of Pulmonary Diseases," by Dr. J. Solis Cohen, of Philadelphia.

The following officers were elected for the ensuing year:

President.—Prof. A. L. Loomis, New York.

First Vice-President.—Dr. F. I. Knight, Boston.

Second Vice-President.—Dr. W. H. Geddings, Aiken, S.C.

Secretary and Treasurer.—Dr. J. B. Walker, Philadelphia.

Council.—Dr. J. H. Tyndale, New York; Dr. E. T. Bruen, Philadelphia; Dr. E. D. Hudson, New York; Dr. Frank Donaldson, Baltimore; Dr. Beverley Robinson, New York.

CHLORAL-QUININE.—A compound of quinine with chloral hydrate has been made by Dr. Mazzara by adding the chloral to an equivalent quantity of quinine dissolved in chloroform. By evaporating the solution and redissolving the residue in ether, the new compound may be obtained in warty crystals. It is said to be volatile at 149° C., and gives fluorescent solutions with acids.—*Canadian Pharmaceutical Journal*.

NEW YORK ACADEMY OF MEDICINE.

A STATED meeting was held April 17, 1884, HORACE T. HANKS, M.D., Vice-President, in the chair.

Dr. ROBERT ABBE read a paper on "*Dupuytren's Contraction of the Hand.*"

A better title would be "*Dupuytren's Finger Contraction.*" The author first described the anatomy of the parts concerned in the disease. It rarely occurred before the middle age of life. It was most frequent among men, the proportion given by one author being one in females to twelve in males. The deformity usually began as a little hardness or contraction at some point in the palmar fascia going towards the finger, and later stood out as a cord and caused flexion of the member. It most commonly affected the ring and little fingers. Dr. Abbe pointed out the signs which distinguished this form of contraction of the fascia from contraction of the tendons beneath.

The author narrated three cases in detail which had come under his care, and gave the principal points in the histories of several others. In the first case there had been contraction of the left little finger over seven years, and of the right ring finger over one year. For two months the band in the right palm had given rise to so severe pain that the hand could not be lifted to the head, so great was the suffering occasioned by motion.

Shortly after making subcutaneous section of the band binding down the left little finger, all pain disappeared from the right hand, although this hand had not been touched by the knife. Subsequently the bands in the right hand were also cut, and a cure of the deformity resulted. In the second case the ring and middle fingers of the right hand were involved, and the ring finger of the left. The patient had been a cutter for twenty years. Fifteen years ago he noticed contraction of left ring finger, and very soon afterwards contraction began to take place in the finger of the right hand, and he complained severely of pain in the back, for which he was long treated by Dr. Seguin and Dr. Gibney. On account of the contraction of the fingers he was referred to Dr. Abbe, who stated that this probably had to do with the pain in the back. Subcutaneous section was made upon both hands, and within a day or two there was amelioration of the pain in the back, and ten days afterwards the patient could dress himself with ease, whereas he had been unable, as he stated, to stoop to pick up something from the floor, even if it were a thousand-dollar bill. The pain never returned, and after a time there was a perfect cure of the deformity of the hands. In the third case there was double Dupuytren contraction of the fingers, which the patient attributed to injury from ball-playing. Twenty-five subcutaneous sections were made to overcome the contraction of the bands, and

the after-treatment was somewhat tedious, but the final result was perfect, except that there yet remained some contraction of one little finger. In several of the cases reported there was a swelling of the joints of the hand after the operation, which somewhat resembled a rheumatic attack, but which the author did not regard as due to rheumatism. The local benefit was no greater than that upon the general health and state of the mind. A brief account was given of about five other cases, and the author stated that in studying the cases one would notice the great prominence of nervous phenomena in all. In explanation of the disease he suggested the following propositions: First, slight traumatism, often entirely traumatic; second, spinal impression produced by this peripheral irritation; third, reflex influence to the part originally hurt, producing insensible hyperæmia, nutritive disturbance, giving rise to contractile bands of fascia, and occasionally a general disease resembling subacute rheumatism; fourth, through contraction of the bands, giving rise to a secondary series of reflex contractions, neuralgias, and general systemic disturbance.

The author quoted Weir Mitchell in proof of the statement that there was a disposition of the profession to regard many general troubles of acute or subacute form as rheumatism when they really were probably of nervous origin or due to an affection of the nervous system. That in a certain proportion of cases of any disease there would be found a rheumatic or a gouty history was undoubtedly true, and such was the case in Dupuytren's contraction of the fingers, but there was not sufficient evidence to prove that either of these two dyscrasias was the cause of the deformity of the hand under consideration.

A sufficient number of incisions should be made to overcome the deformity entirely, and if done with antiseptic precautions danger would be avoided. The hand should not be put too strongly on the stretch after the operation. The transient swelling following the operation was due to nerve-irritation, and not to rheumatism. He had not practised the method of dissecting out the fascia in V-shape, and, judging from his limited experience, Adam's method left nothing to be desired.

Dr. R. F. WEIR said he had been impressed more than once with the nervous symptoms attending Dupuytren's contraction of the fingers, and he had become pretty well converted to the theory of the nervous origin of the trouble. He believed it might be started by traumatism. He also agreed with the author regarding the value of multiple incisions, and his last remark, not to stretch the fingers immediately to full normal extension, he believed to be an important one.

Dr. A. C. POST said his attention had been directed to this subject a number of years

ago, and he believed he was the first American surgeon to call attention to it. Of late years he had not been in the habit of meeting with cases of this disease. He had been very much interested in the paper of the evening, which gave an admirable summary of the subject, and to which, it would seem, very little could be added. It was from the first a matter of surprise to him that Dupuytren's contraction of the palmar fascia of the hand should have ever been mistaken for contraction of the tendons. The cases which he had seen presented nothing which resembled the contraction of tendons. He had noticed that flexion of the wrist and elbow made no difference in the appearance of the bands of contraction within the palm, whereas, if the flexor tendons had been contracted, the approximation of the origin and insertion of the muscles would have influenced the contraction. In the cases upon which he had operated he made open section of the contracted bands. It was not a matter of great importance whether the section were made openly or subcutaneously, for there was entire safety with antiseptic methods, and the wounds had always healed kindly. He had not had any difficulty in extending the fingers which had been contracted, but he had met with the same difficulty of which Dr. Abbe spoke in restoring power of flexion after the operation. There was a considerable length of time during which the patient experienced more suffering in developing power of flexion than he had experienced from the disease. Ultimately, however, power of flexion had been restored. The cases which he had seen he believed to have been of traumatic origin. They occurred for the most part in persons whose palmar integument was thin and delicate originally, and who during some exercise, as rowing, made undue pressure upon the tender parts and excited the disease. He did not know that any of the patients whom he had seen had been afflicted with gout or rheumatism. The flexion usually involved the metacarpo-phalangeal articulation; the distal phalanx was rarely involved; the second one sometimes. He had noticed in one instance that the sheath of the flexor tendon was involved, and division of the palmar fascia did not relieve flexion; it was necessary in addition to divide the sheath of the tendon. There was more inflammation following division of the sheath of the tendon than he had known to occur after division of the palmar fascia.

Dr. FRANK H. HAMILTON said he had studied this subject at an early date, and when Dupuytren gave us his observations he tried to follow his advice, but he could not say with great satisfaction. So far as the theory which the author of the paper had propounded was concerned, it had occupied his mind for a great many years,—viz., that the malady was primarily of neurotic origin, that atrophic

changes had occurred which were due to lesions of the nervous system, and the atrophy of the palmar structure resulted in a permanent contracture of the fascia. The same thing took place in ligaments which for a period of time remained in a state of disuse. This explanation also made clear the reason why power returned so slowly to the flexor tendons after the hand had been straightened. There could be but little question that the disease was sometimes of traumatic origin, but, as it was usually confined to the ring and little fingers, he thought it must be ascribed in some cases to the almost permanently flexed position of these fingers in the occupation of the individual affected. The other fingers were more in use. Their position frequently changed, and hence an opportunity for atrophy from disuse was not permitted.

Dr. L. A. SAYRE said that with regard to the theory of the neurotic origin of the affection which had been advanced, he could give it his hearty endorsement. In all the cases which he had seen there had been pain even before the occurrence of contraction, and he believed that in all there had been a history of traumatism. The pain may have lasted for months, consisting perhaps in a tingling sensation or other altered state of the sensory nerve-filaments for months before positive pain and contraction developed. Since he had adopted Mr. Adam's plan of treatment, cutting the contracted fascia at various points, he had obtained better results. The suggestion made by Dr. Hamilton with regard to atrophy seemed to him to be a very important one, and he had observed some of the best results to take place from encouraging nutrition of the parts by massage even without division of the contracted bands. It was important after an operation to instruct the patient to manipulate the hand and thus bring nourishment to the atrophied tissues.

Dr. V. P. GIBNEY could bear abundant testimony to the painful and distressing neuroses from which many of Dr. Abbe's patients had suffered. He had seen a few cases in which he had made similar observations, and he regarded the paper as an important one in showing the connection between Dupuytren's contraction of the hand and an affection of the nervous system. He had observed that in certain forms of club-foot division of contraction bands in the fascia, after Mr. Adam's method, caused the contortion to yield more readily, with less distress to the patient, and with better final results. He had also been struck by the fact that a good many cases of joint-trouble which were called cases of rheumatism had their commencement in traumatism, and it seemed to him the basis of the permanent trouble lay in the nervous system.

Dr. A. L. RANNEY said that some years ago he made some careful dissections of the hand to determine the verity of the statement that

none of the fasciculi of the palmar fascia went to the thumb. But he found a few distinct cords running to the thumb in every instance. With regard to the proportion of cases of Dupuytren's contraction occurring in women, the author had quoted Keen to the effect that one case out of twelve occurred in women, but Dr. Ranney believed later figures, given by the same author, showed a proportion of about one to five in the different sexes. With regard to the disease having its origin in gout and rheumatism, the theory had always seemed to him doubtful, and he remembered that Dupuytren reported a case in which the disease was congenital. Dr. Ranney never knew gout to be congenital. He did not think it need always be traced to traumatism, for marked nervous irritation could be produced by attitude. No one could now question, for instance, the neurotic origin of writer's cramp, which was produced simply by attitude. It was possible that the reason for the occurrence of the disease in the little and ring fingers more frequently than in the others might be explained in more ways than that offered by Dr. Hamilton. The ulnar nerve, for instance, was more frequently injured than the median, especially at the elbow, and gentlemen were more accustomed to rest their weight upon the elbow than were ladies, which might account in part for the greater frequency of the affection in the male sex. He was not prepared to accept Dr. Abbe's statement, that a sensory impression could be sufficiently localized and be of sufficient duration to cause a hyperplastic induration leading to such contraction. He asked if it would not be more reasonable, since the contraction usually took place slowly, to suppose that there had been an impression transmitted to the nerve-centres which gave rise to the peripheral manifestations, than to suppose those manifestations were due to a localized compression of terminal nerve-filaments. As to the occurrence of the disease in both hands, we knew there was a sympathy between homologous parts, by which, if we, for instance, pinched the left ear of a rabbit, the right would immediately show diminished blood-supply. If we plunged the right hand into cold water, the temperature of the left began at once to go down. Such a relation existed between corresponding parts of the lateral segments of the cord that, when members to which the filaments of one were distributed became affected, the corresponding members sympathized by reflex irritation.

Dr. R. W. AMIDON had recently seen a case of Dupuytren's contraction in which both hands had become affected, but not simultaneously. The case was of interest to him because of certain other neurotic symptoms. The patient had had two attacks of temporary, but sudden and complete, loss of power in the legs. There was now only an exaggeration of the reflexes. There had also

been loss of sexual appetite and power for two years past. There was an atrophic condition of the left half of the tongue.

Dr. POST remarked that there was a reason why traumatism should occur upon the ulnar rather than upon the radial side of the palm, the thenar eminence directing the obstacle to the inner side.

Dr. ABBE closed the discussion, and showed some cases. He thought Dr. Post's remark concerning the reason why injury occurred on the inner oftener than on the outer side of the hand gave the probable explanation of the greater frequency of the deformity there. As to massage, it was to be preferred to stretching, but some of his cases had been so treated for years without the least benefit, and with great disappointment to the patient. This had frequently been the experience of others also.

PHILADELPHIA CLINICAL SOCIETY.

A STATED meeting of the Society was held March 28, 1884, the President, Dr. HENRY BEATES, JR., in the chair.

Dr. DANIEL LONGAKER reported a case of

SUDDEN DEATH AFTER DIPHTHERIA.

The patient, Mary F., æt. 6 years, was seen first on the afternoon of the second day of the disease. Her temperature was 104°, and the general symptoms were of a decidedly adynamic type. She complained of pain and difficulty in deglutition, and a nasal tone of the voice was noticed. On inspection of the throat, congestion and swelling were evident, and a small patch of false membrane was found on the right tonsil. The local trouble continued to grow worse until the fourth day, and was associated with a diminished secretion of urine, in which albumen was found to be present. The membrane was detached on the sixth day, and by the tenth convalescence was established. On the thirteenth day she was seen for the last time. Her pulse was a little accelerated in frequency and still weak. Her appetite was good, and she was sitting up and going down-stairs. Two days later, the fifteenth of the disease, after rising in the morning and feeling quite well, she suddenly fell from the chair from which she was attempting to rise, and expired.

Dr. JOSEPH S. GIBB read a paper on

UMBILICAL HEMORRHAGE.

(See *Medical Times* for May 17, page 616.)

Dr. ALBERT H. SMITH, in opening the discussion, said: I have seen two cases of the kind referred to by the reader of the paper. The first occurred at the end of twenty-four hours after birth in a healthy child. On attention being called to it, the ligature was found loose; this was reapplied carefully. On the following morning the nurse again

discovered hemorrhage, and the child died before I could reach the house. This was not a case of neglected traumatism. The other instance occurred also in a perfectly healthy child, forty-eight hours old. The cord was ligatured by myself, but I soon found hemorrhage occurring freely from the tissue around the cord. A large compress of absorbent cotton was applied by means of Seabury & Johnson's plaster, and a teaspoonful of magnesia given internally. The child was saved. In these two cases there were no hereditary tendencies to this form of trouble; no jaundice; no purpura hæmorrhagica in either the mothers or the infants themselves. We have not so far reached any reasonable theory of its etiology. Jaundice seems a coincidence. Great stress has been laid on hæmophilia, but my experience does not bear it out. In a family under my care, four out of five died of hemorrhage, but none showed any tendency to umbilical hemorrhage. In the autopsies of fatal cases no uniform or persistent conditions have been found. My cases are somewhat remarkable, from the fact that recoveries are rare.

In the treatment we could hardly expect a compress to do much, yet I think this application the best that can be made. A laxative would contribute to lessen blood-pressure and act as a revulsive.

I would suggest that hemorrhage from non-application of a ligature would rarely occur in health, if we are to judge from the fact that in Germany they seldom tie the cord. Difficulty may certainly arise from too early ligation. My practice is not to ligature until the cut extremity has ceased bleeding. It is evident that loosening the ligature would be a dangerous experiment in some of these cases.

Dr. CHARLES K. MILLS.—I have had one very interesting case of umbilical hemorrhage, which recovered. The subject was the fourth child of perfectly healthy parents, the other three children being healthy. There was no trouble until the third day after birth, when an oozing was found at umbilicus and the child vomited blood; the cord was examined and found not bleeding at the extremity; subsequently styptics were applied without result. The hæmatemesis occurred on three occasions during the following twenty-four hours of occasional hemorrhage. The bleeding was finally controlled by transfixion with needles, and a half-drop of aromatic sulphuric acid administered every two hours. The child recovered, and is now perfectly healthy.

Dr. HANNAH T. CROASDALE.—I have had the opportunity of seeing but two cases of umbilical hemorrhage. The first was from shrinkage of the cord and great amount of gelatinous material; after the ligature was closely reapplied the bleeding began again from the cut extremity; I then applied Pean's hæmostatic forceps and left them in position twenty hours. In the other case the hemor-

rhage was controlled by tightening the ligature.

Dr. MARY WILLITS.—To the cases mentioned I would add one seen by myself in hospital. The child was a week or ten days old. After considerable hemorrhage, the bleeding was successfully checked by styptics and a compress.

Dr. HENRY BEATES, JR.—In connection with the hæmatemesis noticed by Dr. Mills, a case seen by myself showed at the autopsy gangrene of the ileum. There was also sloughing at the extremity of the cord.

Dr. JOSEPH S. GIBB.—I am grateful to the members for the relation of their experience with this troublesome affection. The relation of the hemorrhagic diathesis to it is yet a question. There seem, however, to be two things intimately connected with it: the hemorrhagic diathesis and jaundice. The case reported by Dr. Mills would rather support the former theory.

Dr. COLLINS exhibited a bullet that had been removed from the anterior nares of a man. It had remained embedded in the turbinated bones since 1865. An opening in the nasal septum remains, produced at the time of the reception of the wound.

GLEANINGS FROM EXCHANGES.

POST-NATAL DEVELOPMENT OF THE VULVA.

—Dr. Robert C. Moffatt, of Brooklyn, reports two cases of rudimentary vulva at birth with subsequent development (*Proc. Hom. Med. Soc. of the State of New York*). A child two months old was presented in the following condition. The mons veneris was found to be present with extensions downwards and backwards, plainly the rudiments of the labia majora, which were lost in the smooth surface. In the region of the vestibule, just below the commissure of the labia, was a round aperture,—the urethral orifice,—the white skin extending to its border all around. A median raphe was observed extending back to the anus, but this was all. There were no nymphæ, no vulva; the hand passed readily from one thigh to the other, encountering nothing but the raphe. The parts were symmetrical. Six weeks later the labia majora were formed, and the external contour normal. The opening of the urethra had receded to the floor of the vestibule, which was now covered with mucous membrane. The opening to the vagina was only partly visible, because the posterior half of the vulva had not yet opened. The labia were in process of separating, but were held together posteriorly by a transparent, glairy membrane, which was thought to be a part of the mucous membrane. No nymphæ were discerned. The line of opening was the raphe, which still extended to the anus. Subsequently the

girl grew up, married, and had a child. There was also a second case, which was like the preceding one, except that rudimentary nymphæ were found, when first examined, at the age of five months. The manner of development in each case was the same. In both the labia majora were first formed, the growth proceeding from the clitoris backwards, the entire space from the urethra to the anus being solidly filled over. The solid parts opened successively from before backwards, finally presenting the vestibule and vagina distinctly formed.

THE RELATIONS OF THE BLADDER TO THE ABDOMINAL WALL.—The relations of the bladder to the anterior abdominal wall have been recently studied by M. E. Bouley in his dissertation (Paris, 1883), and were the subject of an animated discussion at the Société de Chirurgie with reference to an operation of suprapubic lithotomy performed by M. Després. There was much difference of opinion about the muscoli pyramidales, which are considered by Després as an important landmark in the operation, while M. Marc Sée lays great stress upon their frequent variations in size and situation. According to M. Bouley, these muscles are sometimes found wanting on one or both sides; or there may be two on one side and one or none on the other. Their size also is very variable. The second moot point is that of the relations of the prævesical cul-de-sac of the peritoneum to the upper border of the symphysis pubis. A careful dissection of thirteen bodies has led M. Bouley to the following conclusions: When the apex of the bladder is situated nine to thirteen centimetres higher than the symphysis, the height of the peritoneal fold above the same point can be found by deducting four centimetres from those numbers. When the bladder reaches five to nine centimetres above the symphysis pubis, three centimetres must be deducted. It is, however, essential to remember that the peritoneal fold stands relatively higher in fat than in thin people. M. Bouley has also repeated the experiments of Petersen, who had the idea of raising the peritoneal cul-de-sac above the symphysis by means of an india-rubber ball introduced into the rectum and distended by water; this process seems to answer well, especially in fat people. It is necessary to inject four hundred to six hundred grammes (about one pint) of water.—*London Medical Record.*

SEPARATION OF VESICATING AND DRASTIC PRINCIPLES OF CROTON OIL.—In a recent communication by Mr. R. H. Smiley, of St. Louis, to the *Weekly Medical Review*, he reports that after a series of experiments he had verified the claims of M. Serrier (*Phar. Jour., Tr.*), of the possibility of separating the drastic and vesicating principles of croton oil by means of alcohol. The oil is soluble in equal parts of alcohol, but if the alcohol be in

greater proportion, the oil separates into a soluble and an insoluble portion. The former possesses vesicating powers, the latter acts as a purgative in half-minim doses. There was no griping in any case, and no unpleasant symptom was produced except a slight nausea, which one might expect from any purgative dose of medicine. [It is to be remembered that the croton oil of commerce has several distinct sources, and that the different oils do not all react alike to alcohol. The U.S. Pharmacopœia requires that the oil shall be "soluble in about sixty parts of alcohol." European oil answers to this test, but the Indian oil is partly insoluble. The drug is also liable to adulteration with castor oil, which would be dissolved by the alcohol.]

DEATH FROM CHLORATE OF POTASSIUM.

—A man, 49 years of age, by mistake took a teaspoonful of chlorate of potassium in water every two hours, until he had taken in thirty-six hours nearly two ounces. Dr. Bohn (who reported the case in the *Deutsche Med. Wochenschrift*) found him in a condition of collapse, suffering greatly from pain in the stomach, with complete suppression of urine. Subsequently, sensations of numbness of the hands and feet caused much distress and anxiety. In a period of twenty-four hours, only about half an ounce of dark-colored urine could be obtained, containing blood-corpuscles and brownish tube-casts; and the presence of methæmoglobin was shown with the spectroscope. The collapse increased, and death occurred in two days, preceded by jaundice. The spleen, liver, and kidneys were brown in color; the uriniferous tubules were filled with brownish masses. The red blood-corpuscles were changed in shape and appearance. A similar appearance after diphtheria may be due to the remedy and not the disease. Dr. Bohn condemns the delivery of chlorate of potassium into unprofessional hands, or its common sale as a harmless remedy.

DEATH FOLLOWING THE ADMINISTRATION OF POTASSIUM CHLORIDE.

—During the last four or five years cases of death from the use of potassium chlorate have been of sufficiently frequent occurrence to deter any one from recommending the chlorate to be used freely as a harmless remedy, but it is only quite recently that deaths have been reported from the use of potassium chloride. Dr. Stroinski, of Chicago, kindly furnishes us with the details of the following case, which shows that poisoning by this salt may occur sometimes: "In the year 1864, while at Montjoie, Rhenish Prussia, near the Belgian border, I saw a case in which a Belgian doctor had given a prescription (in the French language) for sixteen powders, each to contain two grains of the chloride, the German druggist dispensing two grammes of the article in each powder. The muscular man died after taking

five powders (ten grammes), and the autopsy, at which I was present, proved the case to be one of poisoning by the chloride,—the man having suffered but from a slight chronic inflammation of the apex of the left lung. In the cited cases there had *not* been substituted the chlorate, but death was produced by the effects of the chloride."

ON THE IMPORTANCE OF DRAINING A SUPPURATING KIDNEY BEFORE PERFORMING NEPHRECTOMY.—Mr. R. Clement Lucas, assistant surgeon to Guy's Hospital, strongly urges this precaution before attempting nephrectomy.

It is not only that drainage relieves at once the patient, and, in many instances, is alone sufficient for cure, but that it renders a subsequent nephrectomy (when necessary) much less dangerous. Thus a double advantage is obtained. At first the patient is subjected to only a trivial operation, which is certain to give relief and may effect a cure; and secondly, should the course of events later indicate the advisability of removing the shrunken kidney, nephrectomy will have a greater chance of success. He showed in his paper that six cases were all successful in which nephrectomy followed drainage, whereas nephrectomy for pyonephrosis, with these cases abstracted, brings a mortality of fifty per cent.

It is but reasonable to anticipate some such difference in the results; for, apart from the accidents which may happen in the attempts to remove a large and adherent bag of pus, it is evident that a much greater surface must be exposed to injury in removing a distended kidney than in excising a shrunken one. Further, drainage gives time and opportunity for the patient to gain strength before being subjected to the major operation.—*British Medical Journal*.

MULTIPLE HEPATIC ABSCESSSES IN A BOY.—Before the Clinical Society of London, Dr. Samuel West related the following case: A Jewish lad, aged 11, who had never lived out of London, had a rigor on January 21, and pain in right hypochondrium. He was brought to the hospital on February 20, with evident hepatic abscess, extremely ill, and temperature of 105°. On February 23 a large abscess aspirated, thirteen ounces of greenish sweet pus removed. Four days later, free incision, seven and a half ounces of turbid purulent fluid; a second abscess discovered and aspirated, one ounce of blood-stained pus removed. On March 6 the two last swellings were again prominent, and were freely laid open, and a drainage-tube inserted. On April 9, a fresh abscess was found, explored, and then freely laid open. From this time convalescence commenced, interrupted only by a diffuse abscess in abdominal walls, which healed on being opened and washed out. Points of the case:—1. The age, eleven years. 2. The number of abscesses, three or

four, and probably more. 3. The absence of any assignable cause. 4. The great relief by evacuation. 5. The rapid fattening during convalescence.

MISCELLANY.

POPULAR SCIENTIFIC LECTURES BY PHYSICIANS.—A course of popular scientific lectures, to be delivered monthly at the Ninth Presbyterian Church of this city, was inaugurated on the 23d instant, by William R. D. Blackwood, M.D., who gave a very interesting and well-illustrated lecture on "A Cup of Tea." If physicians generally were to show more willingness to instruct the public, the result would be greater interest in the public health, measures connected with sanitary science would receive more hearty endorsement by the people, and the medical profession would be more highly esteemed.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF NEW YORK held its seventy-seventh annual commencement on May 13, when one hundred and five candidates for the degree of M.D. were graduated. Addresses were delivered by the Rev. Howard Crosby, D.D., President Barnard, of Columbia College, and Prof. John C. Dalton.

The Alumni Association Prize of five hundred dollars was awarded to Dr. Moses Allen Starr for the best essay on any subject in medicine or surgery showing original research.

THE MASSACHUSETTS MEDICAL SOCIETY will hold its one hundred and third annual session at Boston, in Huntingdon Hall of the Institute of Technology. The anniversary exercises will commence on Tuesday, June 10, and the annual meeting will be held on the following day. The annual discourse will be delivered by Dr. John Crowell, of Haverhill.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will hold its twelfth annual session at St. Louis, Mo., on October 14 to 17, inclusive.

PROF. J. M. DA COSTA was elected President of the Philadelphia College of Physicians at its May meeting.

NOTES AND QUERIES.

COLLECTIVE INVESTIGATION.

THE medical profession, as a rule, is desirous of advancing medical science in order that humanity may be benefited. It is believed that much can be accomplished in this direction by collective investigation. There are many questions arising which a general expression of opinion from practising physicians would greatly aid in elucidating; although the contribution from each would be small, the aggregate would command attention. Therefore, when circulars asking for information as to personal information are received from reputable societies or members of the profession, both courtesy and professional spirit would require attention to them, as their end will only be accomplished with the aid of a large number of experienced observers. The receipt of such an

inquiry is a compliment, and a prompt reply should be considered a duty.

Information upon the following topics is desired by Dr. T. D. Crothers, Secretary of Committee, American Association for the Care of Inebriates, to whom answers should be addressed:

1. Can you give any history of inebriates whose drinking dated from or was influenced by head injuries, sunstroke, syphilis; or could be traced to mental shock, disease or injury of any kind; also to overwork, nervous exhaustion, anemia, and any specific causes which broke down or injured the system?

2. Can you give any facts from observation, bearing on the heredity of inebriety; particularly as to the presence of insanity, epilepsy, phthisis, inebriety, or other neuroses in the parents or relatives of inebriates?

Give cases with histories if possible.

3. Have you seen any cases in which insanity or epilepsy either preceded or followed inebriety? If so, was it traced to the use of alcohol alone, or was it due in part, or in whole, to some inherited or acquired diathesis?

4. Have you noted any distinction between the different forms of inebriety, such as irregular, continuous, or periodical inebriety? State any facts you have noticed which relate to the periods and forms of drinking.

5. What particular mental and physical changes have you noticed concerning the character and general health of the inebriate, that would suggest the idea of disease and the need of physical care and treatment?

6. Have you noticed any form or condition of inebriety that seems to be produced or is largely influenced by the kind of alcoholic drink used, or the work engaged in, or the food or climate, or any other unsanitary surroundings?

Illustrative cases concerning any of these inquiries will be welcome, and a full expression of opinion from observation and experience is urgently requested.

DR. THOMAS F. WOOD, editor of the *North Carolina Medical Journal*, has instituted an inquiry into the effects of tobacco upon the human system, and has issued the following in order to arrive at the actual facts in regard to the effects:

1. What harmful effects have you noticed to follow the prolonged addiction to tobacco?

(a) As regards the nervous system?

(b) The digestive system?

(c) The circulatory system?

(d) The sexual system?

(e) The visual and auditory apparatus?

2. What beneficial results have you observed to follow the use of tobacco?

3. Have you observed any effects upon lying-in women due to snuff addiction?

Is persistent anemia more common among women thus addicted?

Is menstruation impaired by it?

Are patients addicted to tobacco in any form less susceptible to drugs, such as quinine?

The above questions are stated as points which may suggest more important lines of thought. It is desirable to get a reply as early as possible, and as soon as the reports are all in and arranged, a printed copy will be sent to each reporter.

As we believe that the toxic effects of drugs may be much modified by combination, we would like to have the experience of some of our readers upon the combined effects of alcohol and tobacco, as it should not be forgotten that indulgence in one is very apt to be associated with a taste for the other.

BOYLSTON MEDICAL PRIZE QUESTIONS.

Questions proposed for 1885:

I. Alleged Recent Reappearance of Intermittent Fever in New England. Its History, and the Pathology of the Disease. Prize \$250.

II. The Best Preliminary Education for the Study of Medicine. Prize \$200.

Questions proposed for 1886:

I. Influence of the Soil as a Factor in the Causation and Spread of Typhoid Fever. Prize \$350.

II. The Relation of Hospitals to Medical Education. Prize \$200.

Essays to be sent before the first Wednesday in April of each year. For further particulars address

WILLIAM F. WHITNEY, M.D.,

Secretary Boylston Prize Committee.

HARVARD MEDICAL SCHOOL,
BOSTON, MASSACHUSETTS.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 11, 1884, TO MAY 24, 1884.

WALTERS, WILLIAM E., MAJOR AND SURGEON.—Ordered to report for temporary duty to the commanding officer at Plattsburg Barracks, New York. Paragraph 4, S. O. 90, Headquarters Department of the East, May 10, 1884.

HUBBARD, VAN BUREN, MAJOR AND SURGEON.—Relieved from further duty at Fort Stanton, New Mexico, and ordered to Fort Bayard, New Mexico, for duty. Paragraph 3, S. O. 96, Headquarters Department of Missouri, May 12, 1884.

MOSELEY, E. B., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to temporary duty at Vancouver Barracks, Washington Territory. Paragraph 6, S. O. 59, Headquarters Department of Columbia, May 8, 1884.

WILCOX, TIMOTHY E., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Washington Barracks, D.C. Paragraph 2, S. O. 90, Headquarters Department of the East, May 10, 1884.

WILSON, GEORGE F., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Ordered to proceed to Fort Canby, Washington Territory, for temporary duty at that post, relieving Assistant-Surgeon W. O. Owen, Jr., U.S.A., who will report in person at these Headquarters for further orders. Paragraph 5, S. O. 62, Headquarters Department of Columbia, May 12, 1884.

WALKER, P. G., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to duty at Old Fort Colville, Washington Territory, until further orders. Paragraph 3, S. O. 58, Headquarters Department of Columbia, May 7, 1884.

STERNBERG, GEORGE M., MAJOR AND SURGEON.—Relieved from duty in Department of the East, and ordered to report to the Surgeon-General of the Army for temporary duty. Paragraph 2, S. O. 115, A. G. O., May 17, 1884.

MAGRUDER, DAVID L., LIEUTENANT-COLONEL AND SURGEON.—Ordered to be relieved from duty as Medical Director Department of the Missouri, and to proceed to Philadelphia, Pennsylvania, and assume duties of attending surgeon and examiner of recruits in that city.

FRYER, BLENCOWE E., MAJOR AND SURGEON.—From Department of Missouri to Department of Dakota.

EWEN, CLARENCE, CAPTAIN AND ASSISTANT-SURGEON.—From Department of Missouri to Department of the Platte.

STRONG, NORTON, FIRST LIEUTENANT AND ASSISTANT-SURGEON.—From Department of the Platte to Department of Missouri.

Paragraph 7, S. O. 115, A. G. O., May 17, 1884.

LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM MAY 11, 1884, TO MAY 24, 1884.

Medical Inspector D. KINDLEBERGER, to be Fleet-Surgeon of Pacific Station.

Assistant-Surgeon PHILIP LEACH, detached from U.S. steamship "New Hampshire," and ordered to Naval Hospital, Chelsea.

P. A. Surgeon D. N. BERTOLETTE, detached from Naval Academy, and ordered to practice-ship "Dale."

Assistant-Surgeon W. MARTIN, ordered to U.S. steamship "Constellation."

Medical Inspector H. C. NELSON, granted leave of absence for one year.

P. A. Surgeon L. B. BALDWIN, detached from U.S. steamship "Pensacola," and waiting orders.

Surgeon H. M. WELLS, ordered to Naval Hospital, Brooklyn.

P. A. Surgeon J. M. MURRAY, detached from U.S. steamship "Minnesota," and ordered to U.S. steamship "Passaic."

P. A. Surgeon J. R. WAYGENER, ordered to U.S. steamship "Hartford."